



Digitized by the Internet Archive in 2008 with funding from Microsoft Corporation



## CATALOGUE

OF

## THE LIBRARY

OF THE

## ROYAL ASTRONOMICAL SOCIETY

COMPILED TO JUNE 1884

LONDON
ROYAL ASTRONOMICAL SOCIETY
BURLINGTON HOUSE
1886

1.88333

PRINTED BY

SPOTTISWOODE AND CO., NEW-STREET SQUARE

. .~ \*\* LONDON

THE Library of the Royal Astronomical Society consists of about 9,000 volumes, more than half of these being bound volumes of serial publications. The tiers of shelves are numbered 1 to 71, the separate shelves on each tier being distinguished by the letters of the alphabet.

As far as the sizes of the books will permit, they are arranged on the shelves according to subjects. The following table shows the general arrangement at present adopted. This will be liable to change, as the increase of the Library may necessitate the removal of certain subjects to other shelves.

Tier.	Shelf.	Subject,
1 2	$\left. egin{array}{c} A-K \\ C-I \end{array}  ight\}$	Astronomical Works, 17th and 18th Cent.
2	$\left. egin{array}{c} A,B \\ A-I \end{array}  ight.  ight.$	Popular Astronomy.
3 3 4 5	K,L A–L {	Theoretical and Practical Astronomy, &c.
5	,	Observations of Sun, Moon, Planets, Comets, and Meteors.
6		Observations and Catalogues of Stars, &c.
7	A-II	History of Astronomy; Scientific Bibliography.
	I,K	Star Charts.
7 8	A, H-K	Dictionaries, Encyclopædias, &c.
8	B-F )	
9	$\Lambda$ -K	Ephemerides.
10	A-F	
10	G-K } F-K }	Astronomical and Logarithmic Tables, &c.
11	A-C	Chronology, the Calendar, &c.
11	E	Mechanics.
12	C-G	Collected Works.
12	H-K	Differential and Integral Calculus, &c.
13	A-E	Bound volumes of Astronomical Tracts.
13	F-H	Instruments, &c.
13	I, K	Spectroscopic Works.
5	,	1 4

Tier.	Shelf.	Subject.
14	A-E	Physics, Natural Philosophy, &c.
14	F-I	Optics.
15, 16		Reports of English, Colonial and American Observa- tories.
17-23		Transactions of English, Colonial and American Societies, and other Serial Works.
24-31	A-H	Transactions of Continental Societies, and other Serials.
25-31	I, K	Reports of Continental Observatories.
32		Manuscripts.
33		Early printed Astronomical Works.
34		Paradoxical Works, &c.
35		Geography; Voyages and Travels.
36	A-D	Navigation.
36 37-40	E, F }	Meteorology and Terrestrial Magnetism.
41 42	A-D {	Figure of the Earth, Geodesy, Surveys.
42 43	D, E {	Mathematics—Miscellaneous.
44		Geometry and Trigonometry.
45		Arithmetic and Algebra.
46		Astrology; Fluxions; Probabilities.
47		Mathematical Serials, &c.
48, 49		Natural Philosophy, &c.
50		Catalogues of Libraries.
52-71		Transactions of Societies, and other Serials, English and Foreign.

\*\* Tiers 34 to 71 are in the gallery.

The Catalogue contains nearly 7,000 titles, exclusive of cross references and lists of contents of some important series of Reports of Observatories, which it has been thought desirable to insert. The following subject headings have also been given:—

Bibliographies Ephemerides
Dictionaries Star Charts

Papers published in Transactions of Societies, &c., of which the Library possesses separate copies, have been catalogued in most cases—such titles being marked by an asterisk.

The Manuscript Catalogue, which is placed in the Library for reference, is written upon cards, each title bearing the number of the tier and the letter of the shelf.

The Catalogue has been prepared under the direction of the Library Committee, by the Assistant Secretary, Mr. W. H. Wesley.

# CATALOGUE.

Abbattle (Alttoine a /
: *Éclipse totale du Soleil observée le 28 Juillet 1851 en
Norwège. 4to. Paris, 1854
——: Sur le Tonnerre en Éthiopie. 4to. Paris, 1858
Résumé Géodésique des positions déterminées en Éthiopie.
4to. Leipzig, 1859
—: *Eclipse totale du 18 Juillet 1860. 4to. Paris, 1860
: *Description d'un Instrument pour la pratique de la Géo-
désie expéditive [Aba]. 4to. Paris, 1863
— : *Sur la division décimale de l'angle et du temps.
4to. Paris, 1870
- : Géodésie d'Éthiopie, ou triangulation d'une partie de la
Haute Ethiopie, exécutée selon des méthodes nouvelles.
4to. Paris, 1873
——: *Etudes sur la Verticale. Svo. Bordeaux, 1872
——: Observations relatives à la physique du globe, faites au Brésil
et en Éthiopie. Rédigées par R. Radau. 4to. Paris, 1873
: *Sur la latitude d'Abbadie, près de Hendaye (Basses-
Pyrénées). 4to. Paris, 1875
-: *Înstruments à employer en voyage et manière de s'en
—: *Recherches sur la Verticale. 8vo. Bruxelles, 1881
Abbatt (Richard):
— : The elements of plane and spherical trigonometry, and its
application to astronomy, dialling, and trigonometrical sur-
: Orthographic projection of the globe. 8vo. London, 1857
: The elements of physical astronomy. 8vo. Lordon, 1870
—: Ditto. Second edition. Svo. London, 1871
— : Remarks on the infinitesimal calculus. (Appendix to the
elements of physical astronomy.) 8vo. London, 1876
Abbe (Cleveland):
Report on the Solar Eclipse of July, 1878. (Professional papers
of the Signal Service, No. 1.) 4to. Washington, 1881
Abbott (Francis):
-: *Meteorological observations taken at Hobart Town, Tas-
mania, 1856-59. 4to. Hobart Town, 1859
mania, 1856-59. 4to. Hobart Town, 1859—: Results of twenty-five years' meteorological observations.
mania, 1856–59. 4to. Hobart Town, 1859 ——: Results of twenty-five years' meteorological observations.  4to. Hobart Town, 1866
mania, 1856-59. 4to. Hobart Town, 1859—: Results of twenty-five years' meteorological observations.

#### Abbott (Francis)—continued.

Town, with which are incorporated the results of twentyfive years' observations previously published.

4to. Hobart Town, 1872

## Abdilazus, see Alchabitius.

Abetti (Antonio):

---: Cenni storici sul successivo sviluppo della meteorologia e su alcune sue importanti applicazioni. 8vo. Padova, 1872

— : \*Il passaggio di Venere sul Sole osservato a Muddapur il 9 Dicembre 1874. 4to. Palermo, 1875

- : \*Osservazioni e calcoli eseguiti sulla Cometa Swift.

8vo. Venezia, 1880 — : \*Sulla determinazione del Tempo coll' osservazione dei passaggi delle stelle pel verticale della polare. 8vo. Venezia, 1880

— : Sugli elementi dell' orbita del pianeta (170) Maria.

4to. Kiel, 1882

## Abney (William de W.):

---: Instruction in photography. Third edition, 8vo. London, 1876 - : Photography with emulsions: a treatise on the theory and practical working of the collodion and gelatine emulsion processes. 8vo. London, 1882

## Abo:

——: Observationes astronomicæ in Specula Universitatis Litterariæ Fennicæ factæ . . . . instituit F. G. A. Argelander. Tomus 1-3. 1824-28. fol. Helsingforsiæ, 1830-32 ---: See also Argelander (F. W. A.).

#### Aboul Hhassan Ali de Maroc:

Traité des Instruments Astronomiques des Arabes composé au treizième siècle . . . . traduit de l'Arabe . . . . par J. J. Sédillot. 2 vols. 4to. Paris, 1834-35

#### Abraham Judæus:

Tractatus de nativitatibus, per Lucam Gauricum Geophonensem castigatus, & in ordinem redactus atque recognitus, cum infinitis prope modum annotationibus. 4to. Romæ, 1545

#### Abulfeda (Ismael):

Chorasmiæ et Mawaralnahræ; hoc est regionum extra fluvium 4to. Londini, 1650 Oxum descriptio (ed. J. Gravius).

Academy (the). Record of literature, learning, science and art. Vol. 1-6, 8. 4to. London, 1870-75

Adams (George):

--: Astronomical and Geographical essays: containing, I. The general principles of Astronomy; II. The use of the celestial and terrestrial globes; III. The description and use of the Armillary sphere, planetarium, tellurian, and lunarian; IV. An introduction to practical astronomy . . . . Second 8vo. London, 1790 edition.

-: Geometrical and graphical essays, containing a general description of the mathematical instruments used in geometry, surveying, levelling and perspective. Second edition, corrected and enlarged by William Jones (with vol. of plates, Svo. London, 1797 4to.).

Adams (George)—continued.

: Lectures on natural and experimental philosophy, considered in its present state of improvement. Vol. 1, 3.

8vo. London, 1794-99

Adams (John):

——: The mathematician's companion, or a table of logarithms from 1 to 10,860.

Svo. London, 1782

Extracts from a meteorological Journal kept at Elmonton, Middlesex (1792–96, 1811). 12mo. London, 1814

Adams (John Couch):

\*An explanation of the observed irregularities in the motion of Uranus on the hypothesis of disturbances caused by a more distant planet.

8vo. London, 1846

——: On new tables of the Moon's parallax, to be substituted for those of Burckhardt.

8vo. London, 1853

: \*On the secular variation of the Moon's mean motion.
4to. London, 1853

— : See also Cambridge Observatory.

Adelaide, Government Observatory:

Meteorological Observations made.... during the years 1859—61, 1863-65, 1869-70, 1876, 1878-80, under the direction of Charles Todd. fol. Adelaide, 1860-82

Adelaide, Royal Society of South Australia:

: Transactions and Proceedings and Report of the Philosophical Society of Adelaide, 1877-79. Vol. 1-2.

8vo. Adelaide, 1878-79

: Transactions and Proceedings and Report of the Royal Society of South Australia, 1879-83. Vol. 3-6.

8vo. Adelaide, 1880-83

The title of the Society was changed in 1880.

Adler (Marcus N.):

\*Memoir of the late Benjamin Gompertz.

8vo.

Adolph (G. H. W. Carl):

Bahnbestimmung der Mnemosyne und Ableitung der Jupitermasse aus den Mnemosyne Beobachtungen seit 1859. Erster Theil. Inaugural-Dissertation. 4to. Carlsruhe, 1874

Adolph (William):

: The simplicity of the creation, or the astronomical monument of the Blessed Virgin: a new theory of the solar system.

8vo. London, 1859

: Ditto. Second edition. 8vo. London, 1864.: The simplicity of the creation: concise view of a new theory

Acolus. A retrospect of the weather of the twelvemonth past, 1844, and prognostication for that of the coming 1845.

8vo. London, 1845

Agardh (Joh. Mort):

— : De motu systematis solaris progressivo disputatio astronomica [inauguralis]. 2 parts. 8vo. Lunda, 1841

——: Observationes Eclipsis Solis que erat die xxviii Julii MDCCCLI calculate a J. M. Agardh. 4to. Lunde, 1853

Agelet Joseph (Lepaute d'): \*Reduction of the observations of fixed stars made by J. L. D'Agelet at Paris in 1783-85, with a catalogue of the corresponding mean places, referred to the equinox of 1800. By B. A. Gould. 4to. Washington [1866] Agnesi (Maria Gaetana): - : Traités élémentaires de calcul différentiel et de calcul intégral. 8vo. Paris, 1775 -: Analytical institutions in four books. Translated into English by the late Rev. John Colson . . . . [edited by] the Rev. John Hellins. 2 vols. 4to. London, 1801 Agnew (H. C.): A letter from Alexandria on the evidence of the practical application of the quadrature of the circle in the configuration of the great pyramids of Gizeh. 4to. London, 1838 Agrippa (Henricus Cornelius): Three books of occult philosophy . . . . translated out of the Latin into the English tongue by J. F. 4to. London, 1651 Aguilar (Antonio): \*Breve reseña de la Historia y Progresos de la Astronomia. 4to. Madrid, 1855 Aimé (Georges): \*Mémoire sur les variations de niveau de la Méditerranée. 8vo. Paris [1844] Ainslie (John): A treatise on land surveying: new and enlarged edition by William Galbraith. 8vo. Edinburgh, 1849 [Air.] Thoughts on the properties and formation of the different kinds of air. 8vo. London, 1785 Airy (George Biddell): ---: \*On the longitude of the Cambridge Observatory. 4to. Cambridge, 1828 ---: \*On the correction requisite to be applied to the length of a pendulum consisting of a ball suspended by a fine wire. 4to. [Cambridge, 1829] ---: \*On certain conditions under which a perpetual motion is possible. 4to. Cambridge [1829] -: Mathematical tracts on the lunar and planetary theories, the figure of the earth, precession and nutation, the calculus of variations, and the undulatory theory of optics. Second 8vo. Cambridge, 1831 edition. —: \*On an inequality of long period in the motions of the Earth and Venus. 4to. London, 1832 — : Gravitation: an elementary explanation of the principal perturbations in the Solar System. 12mo, London, 1834 - : Populäre physische Astronomie. Aus dem Englischen übersetzt von K. L. von Littrow. 8vo. Stuttgart, 1839

-: Extracts of papers printed and manuscript, laid before the Commission appointed to consider the steps to be taken for restoration of the standards of weight and measure.

4to. London, 1840

Airy (George Biddell)—continued.
: Account of the Northumberland equatoreal and dome,
attached to the Cambridge Observatory.
4to. Cambridge, 1844
: *On the laws of the tides on the coasts of Ireland.
4to. London, 1845
: *Account of the measurement of the astronomical difference
of longitude on the arc of parallel extending from Greenwich
to the Island of Valentia in the south-west of Ireland.
4to. London [1846]
-: Tides and Waves [from the Encyclopædia Metropolitana].
4to. [London, 1848]
—: Six lectures on Astronomy, delivered at Ipswieh,
in the month of March, 1848. Svo. London [1849]  : *On the Eclipses of Agathoeles, Thales, and Xerxes.
4to. London [1853]  : Lecture on the pendulum-experiments at Harton pit
together with a letter containing the results of the experi-
ments. 8vo. London, 1855
-: *Account of the construction of the new national standard
of length, and of its principal copies. 4to. London, 1858
: On the algebraical and numerical theory of errors of obser-
vations and the combination of observations.
8vo. Cambridge, 1861
- : An elementary treatise on partial differential equations,
designed for the use of students in the University.
8vo. Cambridge, 1866
-: On sound and atmospheric vibrations, with the mathe-
matical elements of music. 8vo. London and Cambridge, 1868
—: A treatise on magnetism, designed for the use of students
in the University. 8vo. London, 1870
: Copy of the Report by the Astronomer Royal on the
telescopie observations of the Transit of Venus, 1874, made
in the expedition of the British Government, and on the
conclusion derived from those observations.
fol. London, 1877
: On the undulatory theory of optics, designed for the use of
students in the University. New edition. 8vo. London, 1877
: Account of observations of the Transit of Venus, 1874,
December 8, made under the authority of the British
Government, and of the reduction of the observations.
4to. London, 1881—: A new method of clearing the lunar distance.
8vo. London, 1881
—: See also Weyer (G. D. E.)
: *Logarithms of the values of all vulgar fractions with
numerator and denominator not exceeding 100, arranged in
order of magnitude. 8vo. London, 1881
—: *On a systematic interruption in the order of numerical
values of vulgar fractions, when arranged in a series of
consecutive magnitudes. 8vo. London, 1881
*Monthly means of the highest and lowest dingual tempe-

Airy (George Biddell)—continued.
ratures of the water of the Thames, and comparison with
the corresponding temperatures of the air at the Royal
Observatory, Greenwich. 8vo. London, 1882  —: See also Cambridge Observatory; Greenwich, Royal Ob-
servatory.
Albany, Dudley Observatory:
: The Dudley Observatory and the Scientific Council. State-
ment of the Trustees. 8vo. Albany, 1858
-: See also Gould (B. A.)
: See also Gould (B. A.) : Defence of Dr. Gould by the Scientific Council. Second
edition. 8vo. Albany, 1858: Annals, Vol. 1, 2. 8vo. Albany, 1866-71
: Annual Report of the Astronomer for 1877.
Svo. Albany, 1878
- : See also Boss (L.)
Albèri (Eugenio):
: De Galilei Galileii circa Jovis satellites lucubrationibus
brevis disquisitio. 8vo. Florentiae [1843]
: Risposta ad uno scritto pubblicato in Bologna
intitolato lettera dell' Abate Pietro Pillori sul preteso
ritrovamento delle effemeridi Galileiane dei Satelliti di
Giove. Svo. Marsilia
—: Ultime parole di E Aa' suoi avversari in
materia dei lavori Galileiani sui satelliti di Giove. 8vo.
Albohali:
: De ivdicijs Natiuitatum liber unus, antehac non editus.
Cum priuilegio D. Ioanni Schonero concesso.
4to. Noribergæ, 1546
: De ivdiciis Natinitatū liber unus, antehac non editus.
Epistola nuncupatoria Ioachimi Helleri. 4to. Noribergæ, 1549
Albohazen Haly filius Abenragel:
: Preclarissim' Liber coplet' in iudicijs astrorum (bene
reuisus & fideli studio emēdatus p. dominū Bartolomeum de
Alten de Nusia). fol. Venetiis (E. Ratdolt), 1485
: Preclarissimus Liber completus in iudicijs astrorum
(bene reuisus B. de Alten de Nusia).
fol. [Venetiis], J. B. Sessa, 1503
-: Preclarissimus Liber copletus in iudicijs astrorum
(bene reuisus B. de Alten de Nusia).
fol. Venetiis, 1523
Albubather:
Liber Genethliacys, sine De nativitatibus, non solum ingenti
rerum scitu dignarum copia, uerum etiam iucundissimo
illarum ordine conspicuus. 4to. Norimbergæ, 1540
Albumasar:
— : Introductorium in astronomiam Albumasaris abalachi
octo continens libros partiales.
4to. Augustæ Vindelicorum (E. Ratdolt), 1489
: Flores Albumasaris. (Tractatus florum astrologie.)
4to. Augustæ Vindelicorum (E. Ratdolt), 1495

#### Alcala-Galiano (Dionisio):

Memoria sobre las observaciones de latitud y longitud en cl mar. 4to. [Madrid], 1796

#### Alchabitius:

- : Libellus ysagogic' abdilazi. i. serui gloriosi dei : q' dr alchabiti' ad magisteriū iudiciorum astrorum : īterpretat' a ioañe hispalēsi.

  4to. Venetiis (E. Ratdolt), 1482
- ---: Libellus isagogicus abdlazi. id est serui gloriosi gei. Qui dicitur alchabitius, ad magisterium iudiciorū astrorum interpretatus a Joanne hispalensi, scriptumque in eūdem Joanne saxonie editum (anno 1331).

4to. Venetiis (M. Sessa), 1512
—: Opus ad scrutanda Stellarum Magisteria isagogicū . . . .
restitutū ab . . . . Antonio de Fantis, qui notabilē eiusdē

restitutū ab . . . . Antonio de Fantis, qui notabilē eiusdē Auctoris Libellū de Planetarum Cōiūctionib' . . . addidit & pleraque scitu dignissima cū castigatissimo Joannis de Saxonia Cōmētario. 4to. Venetiis (M. Sessa), 1521

#### Alembert (Jean le Rond D'):

- ---: Traité de dynamique. 4to. Paris, 1742
- ---: Réflexions sur la Cause générale des Vents. 4to. Berlin, 1747
- : Essai d'une nouvelle théorie de la résistance des fluides.
  4to. Paris, 1752
- : Recherches sur différens points importans du système du monde. 3 parts in 2 vols. 4to. Paris, 1754-56
- : Opuscules mathématiques, ou mémoires sur différens sujets de géométrie, de méchanique, d'optique, d'astronomie, &c. 8 vols. 4to. Paris, 1761-80
- \*Recherches sur les mouvemens de l'axe d'une planète quelconque dans l'hypothèse de la dissimilitude des méridiens.

  4to. Paris, 1768

## Alexander (John):

A synopsis of Algebra. . . . To which is added an appendix by Humfrey Ditton. Done from the Latin by Samuel Cobb. 2 parts in 1 vol. 8vo. London, 1709

## Alexander (Stephen):

- : \*Observation of the Annular Eclipse of May 26 [1854], in the suburbs of Ogdensburgh, N.Y. 4to. [1856]
- : See also United States Coast Survey.

## Alfonso X. (of Castile):

- ----: Tabule astronomice Alfonsi Regis (necnon stellarū fixarum longitudines ac latitudines). [Edidit Johannes Lucilius Santritter.] 4to. Venetiis, 1492
  - In the colophon the Tables are said to be 'Opera et arte mirifica viri solertis Johannis Hamman de Landoia, dictus Hertzog.'
- ——: Tabule astronomice Divi Alfonsi Regis . . . . nuper quam diligentissime cum additionibus emendate.

4to. Venetiis (P. Liechtenstein), 1518 (1521)

The first date is that of the title; the second of the colophon.

— : Astronomicæ tabulæ, in propriam integritatem restitutæ, ad calcem adiectis tabulis . . . . cum plurimorü locorū

Alfonso X .- continued.

correctione, & accessione variar tabellar ex diversis auctoribus. . . . Qua in re P. Hamellius . . . . sedula operam suam præstitit. 4to. Parisiis, 1545

— : Libros del saber de astronomia, copilados, anotados y comentados por Manuel Rico y Sinobas. Tomo 1–5, parte 1. fol. Madrid, 1863–67

## Alfonsus de Corduba:

Tabule Astronomice Elisabeth Regine. 2 parts.
4to. Venetiis (P. Liechtensteyn), 1503

Alfraganus (Muhamed):

----: Brevis ac pervtilis compilatio Alfragani Astronomorum peritissimi, totum id cōtinens, quod ad rudimenta Astronomica est opportunum.

4to. Norimbergæ, 1537

— : Chronologica et Astronomica elementa . . . additus est commentarius, qui rationem calendarii Romani, Ægyptiaci, Arabici, Persici, Syriaci & Hebræi explicat . . . autore J. Christmanno. 8vo. Francofurdi, 1590

Algarotti (Francesco):

Sir Isaac Newton's philosophy explain'd for the use of the ladies, in six dialogues on light and colours. From the Italian.

2 vols. 12mo. London, 1739

Algebra:

Elements of Algebra, for the use of students in Universities.

Third edition. 2 parts in 1 vol. 8vo. Edinburgh, 1789

Algöwer (David):

Schrifft- und Vernunfft-mässige Anzeige, dass man sich vor innstehender grossen Sonnen-Finsterniss welche den 3 Maji, 1715, eintreffen wird, weder fürchten noch selbige für ein ausserordentliches Göttliches Zorn- und Straff-Zeichen halten.

#### Alhazen:

Opticæ Thesavrvs . . . . libri septem, nunc primum editi; eivsdem liber de Crepvscvlis & Nubium ascensionibus. Item Vitellonis Thyringopoloni libri x. Omnes instaurati, figuris illustrati & aucti; adiectis etiam in Alhazenum commentarijs à Federico Risnero. fol. Basileæ, 1572

Aliacus (Petrus de) [Cardinal d'Ailly]:

: Cōcordātia astronomie cū theologia; Cōcordātia astronomie cū hystorica narratione, et elucidariū duorum precedentium. 4to. Augustæ Vindelicorum (E. Ratdolt), 1490

: Tractatus . . . . sup. libros Metheororū, de impressionibus aeris. Ac de hijs quæ in prima, secunda, atque tertia regionibus aeris fiunt; sicut sunt Sydera cadentia, Stellæ,

Cometæ . . . . deque generatis infra terram.

4to. Argentinæ, 1504

#### Allé (Moriz):

- : \*Opposition der Calliope vom Jahre 1857. 8vo. Wien, 1856
- -----: \*Ueber die Bahn der Laetitia. Svo. Wien, 1857 ----: \*Ueber die Bahn der Nemausa. Svo. Wien, 1860

[Allen (William)]:

Companion to the transit instrument, containing the right ascension and declination of stars from the first to the fourth magnitude, with the places of some of the most interesting double stars. 8vo. London, 1815

Allgemeine Geographische Ephemeriden:

— : Verfasset von einer Gesellschaft Gelehrter, und herausgegeben von F. von Zach (A. C. Gaspari, C. G. Reichard, F. J. Bertuch). Band 1-51. 8vo. Weimar, 1798-1816

---: Neue allgemeine geographische Ephemeriden . . . . heraus-

gegeben von F. J. Bertuch. Band 1-10.

Svo. Weimar, 1817-22 ---: Neue allgemeine geographische und statistische Ephemeriden. Verfasset von einer Gesellschaft von Gelehrten, und herausgegeben von dem Geographischen Institute. Band 11-23. Svo. Weimar, 1822-27

Almanac for the year 1386. Transcribed, verbatim, from the original antique illuminated manuscript in the black letter. 12me. London, 1812

#### Almanac:

Allmanach und Prognosticon auff das Jahr 1670 durch Johannem Mejerum. 12mo. Hamburg

#### Almanacs:

[A collection of 14 astrological almanacks from 1752, 1760-61.] 3 vols. 12mo. London, 1752-61

#### Al-Sûfi (Abd-al-Rahman):

Description des étoiles fixes composée au milieu du dixième siècle de notre cre par l'astronome persan A.... S.... Traduction . . . . avec des notes par H. C. F. C. Schjel-4to. St.-Pétersbourg, 1874 lerup.

#### Altenburg, Kunst- und Handwerks-Verein:

Naturforschende Gesellschaft. Mittheilungen aus dem Osterlande. Band 15, 16. 8vo. Altenburg, 1861-63

#### Amante (Fedele):

---: \*Considerazioni sulle formole adoperate comunemente dai geografi per calcolare le posizioni geografiche dei vertici dei triangoli geodetici. 4to. Napoli, 1837

- : \*Sulle formole da usarsi ne' calcoli geodetici per la riduzione degli angoli all' orizzonte della stazione.

4to. Napoli, 1837

## American Academy of Arts and Sciences:

——: Memoirs, Vol. 1-4. 4to. Boston and Cambridge, 1785-1818 New series, Vol. 1-11, Part 1. Cambridge, 1833-82

—: Proceedings, 1846-73. Vol. 1-8.

8vo. Boston and Cambridge, 1848-73 New series, 1873-83. Vol. 1-10 (whole series, Vol. 8vo. Boston, 1874-83 9-18).

American Almanac, and Repository of Useful Knowledge, 12mo. Boston, 1833-47 1834-42, 1848.

American Association for the Advancement of Science:  —: Proceedings, Fourth meeting, 1850, to Twenty-first meeting, 1872.  8vo. Washington and Cambridge, 1851-73  —: *Address by S. P. Langley, 1879. 8vo. Salem, 1879  : *Address by Asaph Hall, 1880. 8vo. Cambridge, 1880
American Journal of Mathematics pure and applied: Edited by J. J. Sylvester [and others]. Published under the auspices of the Johns Hopkins University. Vol. 1-6. 4to. Baltimore, 1878-84
American Journal of Science, more especially of mineralogy, geology, and the other branches of natural history; including also agriculture and the ornamental as well as useful arts. Conducted by Benjamin Silliman. Vol. 1.  8vo. New York, 1818
American Journal of Science and Arts. Conducted by Benjamin Silliman. Vol. 2-15. 8vo. New Haven, 1820-29  Second series, conducted by B. Silliman, B. Silliman, jun., J. D. Dana [and others]. Vol. 29-50.  8vo. New Haven, 1860-70
: Third series, edited by J. D. (and E. S.) Dana, B. Silliman [and others]. Vol. 1-27.  8vo. New Haven, 1871-84
General index in every 10th vol. of 2nd and 3rd series.  American Philosophical Society, held at Philadelphia for promoting useful knowledge.  —: Transactions, Vol. 1-6. 4to. Philadelphia, 1789-1809 New series, Vol. 1-15. 4to. Philadelphia, 1818-81  —: Proceedings, 1838-82. Vol. 1-20. 8vo. Philadelphia, 1840-83  —: Catalogue of the Library. Part 1-3.  8vo. Philadelphia, 1868-78  Amici (Giovanni Battista):
*Descrizione di alcuni istrumenti da misurare gli angoli per riflessione. 4to. Modena, 1836
Ampère (André-Marie): Théorie des phénomènes électro-dynamiques, uniquement déduite de l'expérience.  4to. Paris, 1826
Amsterdam, Koninklijke Akademie van Wetenschappen: ——: Verhandelingen. Afdeeling Natuurkunde. Deel 1-23. 4to. Amsterdam, 1854-83
<ul> <li>Verslagen en Mededeelingen. Afdeeling Natuurkunde.</li> <li>17 vols. 8vo. Amsterdam, 1853-65</li> <li>tweede Reeks. Deel 1-18. 8vo. Amsterdam, 1866-83</li> <li>Jaarbock, 1862-82. 8vo. Amsterdam</li> <li>Processen-Verbaal van de gewone Vergaderingen, Afdeeling Natuurkunde, 1865-83. 8vo. Amsterdam</li> <li>Rapport section physique. 8vo. Amsterdam, 1868</li> <li>Catalogus van de Boekerij. 2 vols. 8vo. Amsterdam, 1857-81</li> </ul>
Analekten für Erd- und Himmelskunde:  Herausgegeben von Fr. v. P. Gruithuisen. Band 1, Heft 1-7.  8vo München 1828-21

Analekten (Neue) für Erd- und Himmelskunde:

Band 1, 2 (Heft 8-15). 8vo. München, 1834-36

Analogy (a new) for determining the distances of the planets from the Sun, and of the satellites from their primaries. By the author of 'a new introduction to the mathematics,' &c. Svo. London, 1842

Anderson (Fredrik):

---: \*Bestämning af Planeten (92) Undinas Bana. 4to. Lund, 1870 : \*Bestämning af Planeten (86) Semeles Bana. 4to. Lund, 1872

#### Anderson (Richard):

Lightning conductors; their history, nature, and mode of application. 4to London, 1880

#### André (Charles):

---: Étude de la diffraction dans les instruments d'optique; son influence dans les observations astronomiques. (Paris, Thèses Fac. Sci. no. 376.)

4to. Paris, 1876

----: \*Rapport sur le passage de Mercure sur le Soleil, observé à Ogden (Utah) le 6 Mai 1878. 8vo. Paris, 1881

----: \*Mission de Nouméa. Rapport sur le passage de Vénus du 9 Décembre, 1874. 4to Paris, 1881

#### André (Charles), G. Rayet, et A. Angot:

L'astronomie pratique et les observatoires en Europe et en Amérique, depuis le milieu du xvIIe siècle jusqu'à nos jours. Partie 1-5.

8vo. Paris, 1874-81, 1878

#### [André (Noel),] Chrysologue de Gy:

Abrégé d'astronomie pour l'usage des planisphères.

8vo. Paris, 1778

#### Andrew (James):

Astronomical and nautical tables, with precepts, for finding the latitude and longitude of places by lunar distances, double altitudes, &c. 8vo. London, 1805

## Andrew (William):

Constitution of nature. Theories intended to unfold nature and her operations. Svo. Milwaukee, 1864

## Ångström (A. J.):

Recherches sur le spectre solaire . . . . Spectre normal du soleil : atlas de six planches.

4to. [Atlas in folio], Upsal, 1868

#### Anguiano (Angel):

Viaje á Europa en comision astronómica. 4to. México, 1882

Ann Arbor, Detroit Observatory of the University of Michigan:

Report of the Director for 1879-81. 8vo. Ann Arbor, 1881

Annales de Mathématiques pures et appliquées, recueil périodique, rédigé par J. D. Gergonne. Tome 21, 22.

4to. Nismes, 1830-32

Annals of Philosophy, or Magazine of Chemistry, Mineralogy, Mechanics, Natural History, Agriculture and the Arts: ——: By Thomas Thomson. 16 vols. 8vo. London, 1813-20 New series. Vol. 1-12. 8vo. London, 1821-26 See Philosophical Magazine. Annely (Bernard): A theory of the winds, shewing by a new Hypothesis, the physical causes of all winds in general. 8vo. London, 1729 Anguetil (J. P.): ---: Questions on astronomy, and a new system proposed. 8vo. Paris, 1833 — : Questions sur l'astronomie, suivies de la proposition d'un nouveau système. 8vo. Paris, 1833 Anton (Ferdinand): \*Bestimmung der Bahn des Planeten (114) Cassandra. 8vo. Wien, 1883 Aoust (l'Abbé): Analyse infinitésimale des courbes tracées sur une surface 8vo. Paris, 1869 quelconque. Apelt (Ernst Friedrich): — : Johann Keppler's astronomische Weltansicht. 4to. Leipzig, 1849 ---: Die Reformation der Sternkunde. Ein Beitrag zur deutschen Culturgeschichte. 8vo. Jena, 1852 Apianus (Petrus): ---: Quadrans Apiani astronomicus et jam recens inventus et nunc primum editus. fol. Ingolstadii, 1532 ---: Folium populi: Instrumentum hoc a Petro Apiano jam recens inventum, et in figuram folii populi redactam. fol. Ingolstadij, 1533 - : Instrumentum Primi Mobilis, a Petro Apiano nunc primum et inventum et in lucem editum . . . . accedunt ijs Gebri Filii Affla Hispalensis . . . . libri IX de Astronomia. fol. Norimbergæ, 1534 (Meteoroscopion planum; ---: Astronomicum Cæsareum. observationes cometarum quinque; Compositio Torqueti.) fol. Ingolstadii, 1540 Apianus (Petrus) et Gemma Frisius: Cosmographia . . . . per Gemmam Frisium . . . . jam demum ab omnibus vindicata mendis, ac nonnullis quoque locis aucta. Additis ejusdem argumenti libellis ipsius Gemmæ Frisij. 4to. Antverpiæ, 1564 Apollonius Pergæus: ---: Willebrordi Snellii Apollonius Batavus, seu exsuscitata Apollonii Pergæi περι Διωρισμενης τομης geometria. 4to. Lugodini, 1608 ---: Conicorum libri octo (lib. IV. priores cum Pappi Alexandrini lemmatis, et Eutocii Ascalonitæ commentariis [Gr. & Lat.]; lib. v., vI., vII. ex Arabico in Latinum conversi cum Pappi lemmatis; subjicitur liber conicerum octavus

Apollonius Pergæus—continued.
restitutus). Sereni Antissensis de sectione cylindri et coni
libri duo. (Edidit E. Halleius.)
3 parts in 1 vol. fol. Oxonie, 1710 : Locorum planorum libri II., restituti a Roberto Simson.
4to. Glasguæ, 1749
: Inclinationum libri duo, restituebat Samuel Horsley.
4to. Oxonii, 1770
——: See also Burrow (R.)
— : The two books of concerning tangencies, as they have
been restored by Franciscus Vieta and Marinus Ghetaldus.
With a supplement by John Lawson. Second edition, to which is now added a second supplement, being M. Fermat's
treatise on spherical tangencies. 4to. London, 1771
: The two books of concerning determinate section, as
they have been restored by Willebrordus Snellius, by John
Lawson. To which are added the same two books, by
William Wales, being an entire new work. 4to. London, 1772
——: Opuscula, e tenebris eruta ac restituta (ab E. Halleio). 8vo.
Arago (Dominique François Jean):
: *Rapport sur un mémoire de M. Fresnel relatif aux
couleurs des lames cristallisées douées de la double réfrac- tion. 8vo. Paris [1821]
: *Elogehistorique du docteur Thomas Young. 4to. Paris, 1832
: Betrachtungen über die Bewegung und die Natur der
Kometen, nebst ihrer Einwirkung auf unsere Erde im
Allgemeinen und insbesondere über den Kometen, welcher
im Jahre 1832 erscheint und eine Umlaufszeit von 93/4
Jahren hat. 8vo. Brünn, 1832  : The Comet. Scientific notices of comets in general, and in
: The Comet. Scientific notices of comets in general, and in particular of the comet of 1832 Translated from the
French, by Colonel Charles Gold. 8vo. London, 1833
: Populäre Vorlesungen über die Astronomie Aus dem
Französischen übersetzt von C. H. Schnuse.
8vo. Weimar, 1838
—: Leçons d'Astronomie professées à l'Observatoire Royal
Recueillies par un de ses élèves. Troisième édition.  8vo. Paris, 1840
: *Biographie de Jean Sylvain Bailly. 4to. Paris, 1844
—: Popular Astronomy: Translated from the original,
and edited by Admiral W. H. Smyth and Robert Grant.
2 vols. 8vo. London, 1855–58
— : Astronomie populaire publiée d'après son ordre sous
la direction de J. A. Barral Œuvre posthume.
4 vols. 8vo. Paris, 1857-60  ——: Œuvres complètes publiées sous la direction
de J. A. Barral. Tables. 8vo. Paris, 1862
The index volume only.
-: Kosmische Metcore Anhang zu der Schrift 'Die
Sonne brennt.' 8vo. Leipzig, 1865
: Étoiles doubles, see Grandsagne.
— : Recueil d'Observations, see Biot et Arago.

Aratus Solensis:
— : De siderum natura & motu, see Valderus, Sphæra.
: Les phénomènes d'Aratus de Soles, et de Germanicus
César, avec les scholies de Théon, les catastérismes d'Eratos
thène, et la sphère de Leontius. Traduits pour la première
fois en Français par l'Abbé Halma. [Greek and
French.] 4to. Paris, 1821
Prefixed to Vol. 2 of Halma's edition of the 'Commentaires de Théon.'
-: Des Aratos Sternerscheinungen und Wetterzeichen, über-
setzt und erklärt von J. H. Voss [Greek and German].
8vo. Heidelberg, 1824
: *Observations on a manuscript in the British Museum
containing Cicero's translation of the astronomical poem by
Aratus, accompanied by drawings of the constellations.
By W. Y. Ottley. 4to. London, 1835
-: See also Petavius.
Arbogast (L. F. A.):
Du calcul des dérivations. 4to. Strasbourg, An VIII (1800)
Archimedes:
— : De insidentibus aquæ liber primus (et secundus).
2 vols. 4to. Venetiis, 1565
: Archimedis que supersunt omnia, cum Eutocii Ascalonitæ
commentariis, ex recensione J. Torelli, cum nova versione
Latina. [Gr. & Lat.] Accedunt lectiones variantes (C.
Sibiliati de Vita ac Studiis J. Torelli commentarium).
fol. Oxonii, 1792
—: Arenarius, see Rigaud.
Arctic Expedition, 1875 (Manual for the use of). Natural
history, geology and physics of Greenland and the neigh-
bouring regions Edited by T. Rupert Jones.
8vo. London, 1875
, , ,
Argelander (Friedrich Wilhelm August):
dissertatio. [Inaugural Dissertation.]
4to. Regiomonti Borussorum, 1822
: Untersuchungen über die Bahn des grossen Cometen vom
Jahre 1811. 4to. Königsberg, 1822
: Observationes astronomicæ in Specula Universitatis Littera-
riæ Fennicæ factæ. Aboæ, 1824–1828.
Tomus 1–3. fol. Helsingforsiæ, 1830–32
: DLX Stellarum fixarum positiones mediæ ineunte anno
1830. Ex observationibus Aboæ habitis.
4to. Helsingforsiæ, 1835
—: De fide Uranometriæ Bayeri dissertatio academica.
4to. Bonnæ, 1842
—: Uranometria Nova. Stellæ per mediam Europam solis
oculis conspicuæ secundum veras lucis magnitudines e
coelo ipso descriptæ. obl. fol. Berlin, 1843
— : Catalogus Stellarum. Svo. Berlin, 1843
—: De stella β Lyrae variabili disquisitio. [Inaugural Disser-
tation.] 4to. Bonne, 1844

Argelander (Friedrich Wilhelm August) - continued.

-: Zonen-Beobachtungen vom 45. bis 80. Grade nördlicher
Declination in wittleven Positioner fire of the state of
Declination, in mittleren Positionen für 1842'o, nach
gerader Aufsteigung geordnet von Wilhelm Oeltzen.
8vo. Wien, 1851–52
Vols. I and 2 of Series 3 of 'Annalen der k. k. Sternwarte in Wien.'
-: Zonen-Beobichtungen vom -15° bis -31° Decl. in mittleren
Positionen für 1853, von W. Oeltzen. 8vo. Wien, 1857-58
In Vienna 'Sitzungsberichte,' Bd. 26, 27, 29, 31.
: Anzeige von einer auf der Königlichen Universitäts-Stern-
warte zu Bonn unternommenen Durchmusterung des
nördlichen Himmels. 8vo. Bonn, 1856
— : De stella β Lyrae variabili comme itatio altera.
4to. Bonnæ, 1859
- : Atlas des nördlichen gestirnten Himmels für den Anfang
des Jahres 1855, unter Mitwirkung der Herren E. Schön-
feld und A. Krueger. fol. Bonn, 1863
—: Bonn, Beobachtungen, see Bonn, Sternwarte.
— : Life, see Krueger (A.), Schönfeld (E.)
Argoli (Andreas):
—: Ephemerides ad longitu linem almæ urbis Romæ, ab
anno incarnationis Dominica MDCXXI usque ad MDCXL, ex
Prutenicis Tabulis concinnè supputatæ.
4to. Venetiis, 1623
: Ephemerides annorum L., iuxta Tychonis Hypotheses, et
accuraté e coelo deductas observationes. Ab anno 1630
ad annum 1680. 3 vols. 4to. Venetiis et Patavii, 1638
-: Tabulæ Primi Mobilis. Tabulæ Ascensionum obliquarum
ad latitud. gr. 31 usque ad 60. Vol. 2. 4to. Patavii, 1644
-: Ptolemæus parvus in genethliacis junctus Arabibus.
4to. Lugduni, 1652
: Ephemerides exactissimæ cælestium motuum ad longitu-
dinem Almae Urbis, et Tychonis Brahe hypotheses, ac
deductas è celo accurate observationes, ab anno 1641 ad
annum 1700. Vol. 1, 3. 4to. Lugduni, 1659
Arguelles (José Reguero):
Astronómia Física. Nociones de esta ciencia sublime, dirigidas
á ponerla al alcance de todos, y á preparar al estudio
elemental de la misma. 3 vols. 8vo. Madrid, 1850–51
Aristarchus Samius:
: De magnitudinibus et distantiis Solis et Lunæ liber; cum
Pappi Alexandrini explicationibus quibusdam, à F. Com-
mandino in Latinum conversus ac commentariis illus-
mandino in Latinum conversus ac commentarijs illus- tratus. 4to. Pisauri, 1572
tratus. 4to. Pisauri, 1572

Περι Κοσμου. Curavit editionem J. Chr. Kappius.

8vo. Altenburgi, 1792

Aristotle:

#### Arithmetic:

Six lectures on arithmetic, containing a familiar explanation of the principles and rationale of the general rules of arithmetic.

12mo. London, 1842

Armagh Observatory:

- ----: Astronomical Observations made . . . . by T. R. Robinson. Vol. 1, Parts 1-3. London, 1829-32
- : Report made at the annual visitation . . . . by T. R. Robinson. 8vo. Armagh, 1842
- ---: Places of 5.345 stars observed from 1828 to 1854 . . . . by T. R. Robinson. 8vo. Dublin, 1859
- —: \*Places of one thousand stars observed at the Armagh Observatory. By T. R. Robinson. 4to. Dublin, 1879

#### Armellini (Tito):

\* Di alcune proprietà del Barometro-Idrargiro Statico.

8vo. Roma, 1862

#### Arndtsen (Adam):

Physikalske meddelelser . . . . udgivne af C. Hansteen. Universitets-Program 1858. 4to. Christiania, 1858

Arnold (J.), see Earnshaw and Arnold.

#### Arnott (Neil):

- : Elements of physics, or natural philosophy, general and medical Second edition. 8vo. London, 1827
- : Elements of physics, or natural philosophy, general and medical, explained independently of technical mathematics. In two volumes: Vol. 2, Part 1, comprehending the subjects of heat and light.

  8vo. London, 1829
- : Elements of physics, or natural philosophy. general and medical. . . . New edition with additions, by Isaac Hays.

  8vo. Philadelphia, 1841

#### Arrest (Heinrich Louis d'):

- -----: \* Resultate aus Beobachtungen der Nebelflecken und Sternhaufen. . . Erste Reihe. 8vo. Leipzig, 1856
- ——: Instrumentum magnum æquatoreum in Specula Universitatis Hauniensis nuper erectum. [Inaugural Dissertation.]

  4to. Hauniæ, 1861
- : Siderum nebulosorum observationes Havnienses institutae in Specula Universitatis per tubum sedecimpedalem Merzianum ab anno 1861 ad annum 1867. 4to. Havniæ, 1867
- ----: Undersögelser over de nebulose stjerner i henseende til deres spektralanalytiske egenskaber. (Indbydelsesskrift til Kjöbenhavns Universitets Aarsfest.) 4to. Kjöbenhavn, 1872
- : Life, see Dreyer (J. L. E.)
- Art (1') de vérifier les dates des faits historiques, des inscriptions, des chroniques, et autres anciens monuments . . . . par un religieux de la congrégation de Saint-Maur.

## 42 vols. 8vo. Paris, 1819–30

#### Arthus (Gothard):

Cometa orientalis. Kurtze und eygentliche Beschreibung dess newen Cometen . . . . 1618.

4to. Franckfurt am Mayn, 1619

Ashby (Samuel):
The young analyst's exercise. 12mo. London, 1737
Ashe (E. D.):
-: On the longitude of some of the principal places in Canada,
as determined by electric telegraph. 8vo. 1858
—: The motions of the top, teetotum, and gyroscope explained.
8vo. Quebec, 1864
— : The proceedings of the Canadian eclipse party, 1869.  fol. Quebec, 1870
Asiatic Society of Bengal, see Calcutta.
Assemanus (Simon): Globus cælestis Cufico-Arabicus Veliterni Musei Borgiani
illustratus : premissa ejusdem de Arabum astrono-
mia dissertatione et adjectis duabus epistolis Josephi Toaldi.
4to. Patavii, 1790
Associazione Italiana per le osservazioni delle Meteore
luminose:
: Osservazioni, 1874-77, 1881-83. 12mo. Torino
-: See also Moncalieri, R. Collegio Carlo Alberto.
Asten (Friedrich Emil von):
—: Determinatio orbitæ grandis cometæ anni 1858 e cunctis observationibus. [Inaugural Dissertation.]
4to. Bonnæ, 1865
: *Neue Hülfstafeln zur Reduction der in der Histoire Céleste
Française enthaltenen Beobachtungen. 8vo. Leipzig, 1868
-: * Resultate aus Otto von Struve's Beobachtungen der
Uranustrabanten. 4to. St. Pétersbourg, 1872
: * Untersuchungen über die Theorie des Encke'schen Cometen. I. Berechnung eines wichtigen Theiles der absoluten
Jupitersstörungen. II. Resultate aus den Erscheinungen
1819–1875. 4to. St. Pétersbourg, 1872–78
: *Ephemeride des Encke'schen Cometen für das Jahr 1875.
4to. [St. Petersburg]
Astrand (Joh. Julius):
: Om astronomiska og geodetiske observationer i sommeren
1861. Svo. Christiania, 1863
-: Let og nøiagtig methode for bestemmelse af den paakom-
mende bredde og længde om middagen samt compassets mis- visning, uden hjælp af logarithmer. 4to. Bergen, 1864
: Indberetning om astronomiske og geodetiske observationer
anstillede paa en reisc i Søndre Bergenhuus Amt i Som-
merch 1863. Svo. Christiania, 1864
: *Enkel approximations method ör tids- och longituds-
bestämningar. 8vo. Stockholm, 1865
: *Neue einfache Methode für Zeit- und Längenbestimmung.
Mit Vorbemerkungen von K. von Littrow. 8vo. Wien, 1867  : *Ny Interpolationsmethode. 8vo. Christiania, 1877
-: *Neue Interpolationsmethode. 8vo. Leipzig
-: *Om 'Archibald Smith's method' för beräkning af kompas-
sens lokaldeviationer, samt ett par enklare och noggrannare
methoder för samma ändamål. 8vo. Stockholm, 1875

Astrand (Joh. Julius) - continued.
——: *Ny method för lösning af trinomiska eqvationer.  8vo. Stockholm, 1877
: *Two short and easy methods for correcting lunar distances.
: See also Petrosemolo (G.)  8vo. London, 1879
— : Om en ny methode for løsning af trinomisk eligninger af n <sup>te</sup> Grad.  8vo. Kristiania
: See also Christiania, Universitet.
Astrolabe: L'usage de l'un et l'autre astrolabe particulier et universel. 8vo. Paris, 1625
Astrologer (the). Nos. 8-16. 8vo. London [1830-31]
Astrologer (the) of the nineteenth century, or the master key of
futurity By the members of the Mercurii Seventh edition. 8vo. London, 1825
Astrology:
Several cases of conscience concerning astrologie, and seekers unto astrologers, answered. By a Friend to the truth.  8vo. London, 1659
Astrology and Astronomy [from the Encyclopædia Britannica].
Astronomical Journal (the):
Edited by Benjamin Apthorp Gould. Vol. 1-6. 4to. Cambridge and Albany, 1851-61
Astronomical Notices, by F. Brünnow. Nos. 1-24, 26-28.
Astronomical Register (the):  8vo. Ann Arbor, 1858-61
: A medium of communication for amateur observers, and all others interested in the science of astronomy. Vols. 1-21.  8vo. London, 1864-83
: General Index to the first twenty volumes, by F. W. Levander.  8vo. London, 1883
Astronomie (Geschichte der) von den ältesten Zeiten bis zu dem Ende des siebzehnten Jahrhunderts. Neue Ausgabe. 8vo. Chemnitz, 1819
Astronomie (l'):
Revue d'astronomie populaire, de météorologie et de physique du globe. Publiée par Camille Flammarion. Année 1-3. 1882-84. 8vo. Paris, 1883-84
Astronomische Abhandlungen:
Herausgegeben von H. C. Schumacher. Heft 1-3.
4to. Altona, 1823-25 Astronomische Gesellschaft, Leipzig:
: Publicationen, 1-17. 4to. Leipzig, 1865-83
: Vierteljahrsschrift. Jahrgang, 1-18. 8vo. Leipzig, 1866-83
Astronomische Nachrichten:  ——: Herausgegeben von H. C. Schumacher. Band 1-31.
4to. Altona, 1823-51

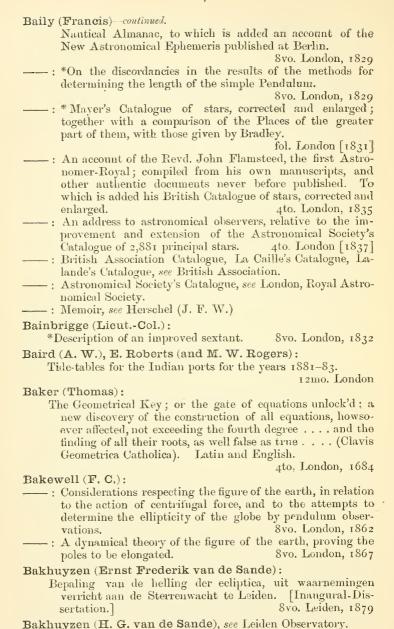
Astronomische Nachrichten-continued.
-: Begründet von H. C. Schumacher, fortgesetzt von A. C.
Petersen (P. A. Hansen, C. A. F. Peters, C. F. W. Peters).
Band 32–99. 4to. Altona, Kiel, 1851–81
Band 32-99.  Begründet von H. C. Schumacher, unter Mitwirkung des
Vorstandes der Astronomischen Gesellschaft, herausgegeben
von A. Krueger. Band 100–108. 4to. Kiel, 1881–84
: General-Register der Bände 1–20. Ausgearbeitet von G. A.
Jahn. 4to. Hamburg, 1851 ——: General-Register der Bände 21–40. Ausgearbeitet von G. A.
Jahn. 4to. Hamburg, 1856 —: General-Register der Bände 41–60. Ausgearbeitet von C. F.
W. Peters. 4to. Hamburg, 1866 ——: General-Register der Bände 61–80. Ausgearbeitet von C. F.
W. Peters. 4to. Leipzig, 1875
Astronomisches Jahrbuch, see Berlin.
Astronomisches Jahrbuch für physische und naturhisto-
rische Himmelsforscher : Herausgegeben von Fr. v.
P. Gruithuisen. Band 1-11. 8vo. München, 1838-51
Astronomy (a new theory of), deduced from the latest discoveries.
16mo. Dublin, 1857
: (Syllabus of an elementary system of). 8vo. Cambridge
: (Synabus of an elementary system of): 500. Cambridge :: (the new system of): or, is the earth a fixed star or a
Athenæum:
Journal of Literature, Science, and the fine arts.
4to. London, 1831–84
Atheneum Library:
Catalogue [with supplement]. 8vo. London, 1845-51
Athens, Observatoire:
— Publications re Série. Tome 1. Astronomische
Beobachtungen über Cometen, von J. F. J. Schmidt.
4to. Athen, 1863
: 2me Série, Tome 1. Beiträge zur physikalischen Geo-
graphie von Griechenland, von J. F. J. Schmidt.
4to. Athen, 1861
Atkinson (Henry):
-: *On astronomical and other refractions. 4to. London, 1826
— : A new method of extracting the roots of equations.
4to. Newcastle, 1831
Atkinson (James):
Epitome of the art of navigation, or a short, easy, and metho-
dical way to become a compleat Navigator.
8vo. London, 1753
Atwood (George):
-: An essay on the arithmetic of factors, applied to various
-: An essay on the arithmetic of factors, applied to various
- : An essay on the arithmetic of factors, applied to various computations which occur in the practice of numbers,  4to. London, 1786
- : An essay on the arithmetic of factors, applied to various computations which occur in the practice of numbers,  4to. London, 1786
- : An essay on the arithmetic of factors, applied to various computations which occur in the practice of numbers, 4to. London, 1786 - : An analysis of a course of lectures on the principles of
- : An essay on the arithmetic of factors, applied to various computations which occur in the practice of numbers, 4to. London, 1786 - : An analysis of a course of lectures on the principles of natural philosophy.  8vo. London, 1784
- : An essay on the arithmetic of factors, applied to various computations which occur in the practice of numbers, 4to. London, 1786 - : An analysis of a course of lectures on the principles of

Atwood (George) -continued. with a description of original experiments relative to the subject. 8vo. Cambridge, 1784 August (E. F.): Vollständige logarithmische und trigonometrische Tafeln, zum Theil in neuer Anordnung, durch Zusätze erweitert und mit ausführlichen Erläuterungen versehen. . . . . Sechste Auflage. 8vo. Leipzig, 1865 Autior ( -- ): Extrait de l'astronomie physique (ouvrage en préparation). 8vo. Paris, 1877 Auwers (G. F. J. Arthur): De motu proprio Procyonis variabili. Dissertatio Inauguralis Astronomica. 4to. Regimonti Prussorum, 1862 -: \*William Herschel's Verzeichnisse von Nebelflecken und Sternhaufen. fol. Königsberg, 1862 ---: \*Parallaxen-Bestimmungen mit dem Königsberger Helio-4to. Altona, 1863 — : Reduction der Beobachtungen der Fundamentalsterne am Passageninstrument der Sternwarte zu Palermo, 1803-5. 4to. Leipzig, 1866 ---: \*Bestimmung der Bahn des Cometen III, 1860. 4to. Berlin, 1867 ---: \*Bestimmung der Parallaxe des Sterns 34 Groombridge durch chronographische Beobachtungen am Aequatoreal der Gothaer Sternwarte. 4to. Berlin, 1867 — : Untersuchungen über veränderliche Eigenbewegungen. Erster Theil. Bestimmung der Elemente der Procyonbahn [&c.]. Inaugural-Dissertation. 4to. Königsberg, 1862 -: \*Zweiter Theil. Bestimmung der Elemente der Siriusbahn. 4to. Leipzig, 1868 --: \*Untersuchungen über die Beobachtungen von Bessel und Schlüter am Königsberger Heliometer zur Bestimmung der Parallaxe von 61 Cygni. 4to. Berlin, 1868 --: \*Über den Werth der Aberrations-Constante, nach den Beobachtungen von Molyneux. 8vo. Berlin, 1869 - : \*Über eine angebliche Veränderlichkeit des Sonnendurchmessers. 8vo. Berlin, 1873 - : \*Nachtrag zu den Untersuchungen über die veränderliche Eigenbewegung des Procyon. 8vo. Berlin, 1873 ---: \*Uber der Parallaxe die Sterns 1830 Groombridge nach Johnson's Beobachtungen am Oxford Heliometer. 8vo. Berlin, 1874 ---: \*Bericht über die Beobachtung des Venus-Durchgangs vom 4to. Berlin, 1878 8. December 1874 in Luxor. - : Fundamental-Catalogue für die Zonen-Beobachtungen am nördlichen Himmel. 4to. Leipzig, 1879 - : See also Herz und Strobl. ---: \*Mittlere Örter von 83 südlichen Sternen für 1875. 4to. Leipzig, 1883 ---: Neue Reduction der Bradley'schen Beobachtungen aus den Jahren 1750 bis 1762. Band 2. 4to. St. Petersburg, 1882

Babbage (Charles):
-: A letter to Sir Humphry Davy on the application of
machinery to the purpose of calculating and printing
mathematical Tables. 4to. London, 1822
: *On the influence of signs in mathematical reasoning.
4to. Cambridge, 1826
- : Table of the logarithms of the natural numbers from 1 to 108,000 Second edition. Svo. London, 1831
- : Observations on the temple of Serapis at Pozzuoli near
Naples With a supplement: conjectures on the phy-
sical condition of the surface of the Moon.
Svo. London, 1847
- : Observations addressed, at the last anniversary, to the Presi-
dent and Fellows of the Royal Society. [On the Swedish
tabulating machine.] 8vo. London, 1856
: Examples of the solutions of functional equations. 8vo.
With Peacock and Herschel's Examples of the calculus.
: Life, see Quetelet (L. A. J.)
[Babbage, Charles: Calculating Machine]:
*The eleventh chapter of the History of the Royal Society, by
C. R. Weld, with Prof. De Morgan's review from the
'Athenæum,' Oct. 14 & Dec. 16, 1848. 8vo. London, 1848
Bach ( — ):
Calcul des éclipses de soleil par la méthode des projections.
8vo. Paris, 1860
Bache (Alexander Dallas):
: *On the tides of the western coast of the United States: Tides
of San Francisco Bay, California. 8vo. New Haven, 1856
-: *On the heights of the tides of the United States, from ob-
servations in the Coast Survey. 8vo. New Haven, 1858 —: *Discussion of the magnetic and meteorological observa-
tions made at the Girard College Observatory, Philadelphia,
in 1840-45. 4to. Washington, 1859-62
: *Lecture on the Gulf Stream. 8vo. New Haven, 1860
- : *General account of the results of Part 2 of the discussion
of the declinometer observations made at the Girard College,
Philadelphia, between 1840 and 1845, with special reference
to the solar diurnal variation and its annual inequality.
8vo. New Haven, 1861
-: *Records and results of a magnetic survey of Pennsylvania
and parts of the adjacent States. 4to. Washington, 1863
: Tide tables for the use of navigators; prepared from the Coast Survey Observations. 8vo. [1857]
Backlund (J. O.):
*Beräkning af relativa störingar för planeten (112) Iphigenia.
Backlund (O.):
: *Elemente und Ephemeride des Encke'schen Cometen für
das Jahr 1881. 4to. St. Pétersbourg, 1881
: *Zur Theorie des Encke'schen Cometen.
4to. St. Pétersbourg, 1881

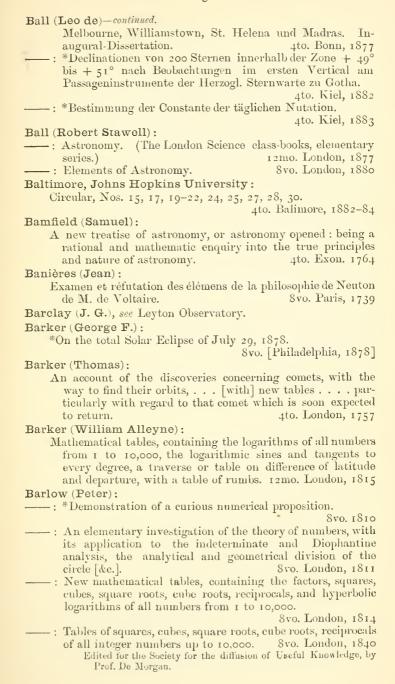
*Bestämning af Polhöjden för Lund's Observatorium medelst observationer i första vertikalen. 4to. Lund, 1867
Bacon (Francis):  ——: Sylva sylvarum, or a Naturall Historie. In ten centuries  published by William Rawley. Third edition [to which is added] New Atlantis. 2 parts in 1 vol.  fol. London, 1631
: Resuscitatio, or bringing into publick light several pieces of the works hitherto sleeping, of Francis Bacon together with his lordship's life; second edition. By William Rawley, [to which is added] several letters, written by this honourable authour. 2 parts in 1 vol.  fol. London, 1661-57
: Baconiana, or certain genuine remains of Sr. F. B, in arguments civil and moral, natural, medical, theological, and bibliographical.  8vo. London, 1679  : Novum organum scientiarum, in two parts.
2 vols. 8vo. London, 1802 Vols. 3 and 4 of collected works.
: Works. 12 vols. Svo. London, 1815
Bacon (Roger):  Opus majus ex MS. codice Dubliniensi, cum aliis quibusdam collato, nunc primum edidit S. Jebb.
fol. Londini, 1733 Baden Powell, see Powell (Baden).
Baeyer (J. J.):  Die Küstenvermessung und ihre Verbindung mit der Berliner Grundlinie, ausgeführt von der trigonometrischen Abtheilung des Generalstabes.  4to. Berlin, 1849  See also Berlin, K. preuss. geodät. Institut; Bessel und Baeyer.  Bagay (V.):
Nouvelles tables astronomiques et hydrographiques, contenant un traité des cercles de la sphère; la description des instru- ments à réflexion; diverses méthodes pour obtenir les lati- tudes et les longitudes terrestres; une nouvelle table des logarithmes, des sinus, cosinus, tangentes et cotangentes de seconde en seconde pour les 90 degrés du quart du cercle. 4to. Paris, 1829
Bailly (Jean Sylvain):  —: Essai sur la théorie des satellites de Jupiter, suivi des tables de leurs mouvemens, déduits du principe de la gravitation universelle avec les tables de Jupiter, par M. Jeaurat.  4to. Paris, 1766
<ul> <li>: Histoire de l'Astronomie ancienne, depuis son origine jusqu'à l'établissement de l'École d'Alexandrie. 4to. Paris, 1775</li> <li>: Geschichte der Sternkunde des Alterthums bis auf die Errichtung der Schule zu Alexandrien [übersetzt von C. E. Wünsch].</li> <li>2 vols. 8vo. Leipzig, 1777</li> <li>: Lettres sur l'origine des sciences, et sur celle des peuples de l'Asic, adressées à M. de Voltaire.</li> <li>8vo. Paris, 1777</li> </ul>

Bailly (Jean Sylvain)—continued.
: Histoire de l'Astronomie ancienne, depuis son origine jusqu'à l'établissement de l'école d'Alexandrie. Seconde Édition.
4to. Paris, 1781  : Traité de l'Astronomie indienne et orientale; ouvrage qui peut servir de suite à l'histoire de l'astronomie ancienne.  4to. Paris, 1781  2to. Paris, 1781
: Geschichte der neuern Astronomie.
2 vols. 8vo. Leipzig, 1796 Vol. 1. Von der Stiftung der alexandrinischen Schule bis zu ihrem Untergange.
Vol. 2. Vom Untergange der alexandrinischen Schule bis Kepler.
: Histoire de l'Astronomie Ancienne et Moderne dans laquelle on a conservé littéralement le texte historique de l'Auteur, en supprimant les détails scientifiques, les calculs abstraits [&c.] par V. C. [Victor Comeyras].
2 vols. 8vo. Paris, 1805 —: Manuel d'Astronomie, ou traité élémentaire de cette science
d'après l'état actuel de nos connaissances. 8vo. Paris, 1825  Biography, see Arago.
Baily (Francis):
- : The doctrine of interest and annuities analytically investi-
gated and explained, together with several useful tables con- nected with the subject. 4to. London, 1808  The doctrine of life-annuities and assurances, analytically investigated and practically explained, together with several useful tables connected with the subject; to which is now
added an appendix. 2 vols in 1. Svo. London, 1813  Memoir relative to the annular eclipse of the sun which will happen on September 7, 1820. Svo. London, 1818
- : Astronomical Tables and remarks for the year 1822.
8vo. London, 1822 : *On some new tables of Aberration and Nutation.  8vo. London, 1822
: Remarks on the present defective state of the Nautical
Almanac. 8vo. London, 1822  —: An address delivered at a Special General Meeting of the
Astronomical Society of London, on presenting the Gold
medals to J. F. W. Herschel, J. South, and Professor Struve.
8vo. London, 1826: *A list of moon-culminating stars for 1827.
8vo. London, 1827 : Astronomical tables and formulæ, together with a variety
of problems explanatory of their use and application. To which are prefixed the elements of the solar system.
8vo. London, 1827 —: *On some new auxiliary tables for determining the apparent
places of the Greenwich stars. 8vo. London, 1827
[]: *On the Royal Observatory at Palermo. 8vo. London, 1827
: Catalogue of Zodiacal stars. 8vo. London [1827]



Ball (Leo de):

----: Untersuchungen über die eigene Bewegung des Sonnensystems, abgeleitet aus Beobachtungen der Sternwarten Cap,



Barlow (Peter) - continued.
- : An essay on the strength and stress of timber also
an appendix on the strength of iron and other materials.
8vo. London, 1817
- : Ditto. New edition, by J. F. Heather, to which is added an
essay on the effects produced by causing weights to travel
over elastic bars, by Rev. R. Willis. 8vo. London, 1851
: An essay on magnetic attractions, and on the laws of terrestrial and electro-magnetism. Second edition.
8vo. London, 1823
: See also Encyclopædia Metropolitana.
Barlow's Fluid Lens (reports upon), by Sir J. F. W. Herschel,
Prof. Airy, and Capt. W. H. Smyth. 8vo. London, 1833
Barneby (Thomas):
Catalogue of popular sidereal objects (150) in the order of
their Right Ascension on the 1st January, 1870.
8vo. Worcester, n.d.
(Barrington, Daines):
The probability of reaching the North Pole discussed, [to-
gether with] additional instances of navigators who have
reached high northern latitudes. 2 parts. 4to. London, 1775
Barrow (Isaac):
——: The usefulness of mathematical learning explained and de-
monstrated; being mathematical lectures read in the public
schools at the University of Cambridge Translated by
the Rev. John Kirkby.  8vo. London, 1734
— : Geometrical lectures, explaining the generation, nature and properties of curve lines Translated from the Latin
by Edmund Stone. 8vo. London, 1735
-: Mathematical works Edited for Trinity College by
W. Whewell. 8vo. Cambridge, 1860
Bartholini (Caspar):
Specimen philosophiæ naturalis, præcipua physices capita
exponens accedit de fontium fluviorumque origine
ex pluviis dissertatio physica. 12mo. Amstelædami, 1697
Basel. Bernoullianum Anstalt für Physik, Chemie und
Astronomie an der Universität:
: *Beschreibung und Pläne. 8vo. München
: Bericht für 1879. 8vo. München, 1880
Baselli (Gio. Alberto):
An essay on mathematical language; or an introduction to
the mathematical sciences. 8vo. London, 1787

Bashforth (Francis):

----: \* Description of a chronograph adapted for measuring the varying velocity of a body in motion through the air, and for other purposes.

8vo. London, 1866

----: Reports on experiments made with the Bashforth Chronograph to determine the resistance of the air to the motion of projectiles. 1865-1870 8vo. London, 1870

— : Usus astronomicus planisphærii stellati, seu vice-globi coelestis in plano delineati compendiaria introductio.

4to. (Argentine, 1624)
— : Tabulæ logarithmicæ, see Kepler et Bartsch.
Batavia, Magnetical and Meteorological Observatory:  ——: Observations 1866-80, made under the direction of P. A. Bergsma. Vols. 1-5. 4to. Batavia, 1871-82  ——: Regenwaarnemingen in Nederlandsch-Indië. Jaargang 1-4, 1879-82, door P. A. Bergsma (& J. P. van der Stok).  8vo. Batavia, 1880-83
Batavia, Natuurkundige Vereeniging in Nederlandsch Indië:  ——: Verhandelingen (Acta). Deel 1-6. 4to. Batavia, 1856-59  ——: Natuurkundig Tijdschrift voor Nederlandsch Indië. Deel 1-20, 22-26, 28-43 (serie 1-8). 8vo. Batavia, 1850-84
Bateman (Joseph):  The construction and application of the sliding rule used by the officers of Her Majesty's revenue. 12mo. London, n.d
Bauernfeind (Carl Maximilian): Die Bedeutung moderner Gradmessungen. 4to. München, 1866
Bauernfeind (Carl Maximilian) und Carl Bruhns:

Bayer (Johannes):

Bartsch (Jacob):

— : Explicatio characterum æneis Uranometrias imaginum, tabulis, insculptorum, addita, & commodiore hac forma tertiùm redintegrata. 4to. Augustæ Vindelicorum, 1654— : Ditto.

: Uranometria, omnium asterismorum continens schemata,

nova methodo delineata, aereis laminis expressa. [Third Edition.] fol. Ulmæ, 1661

\*Bestimmung des geographischen Längenunterschiedes zwi-

Bayer (Theophil. Siegfried):

schen Leipzig und München.

Baxendell (J.), see Knott and Baxendell.

De Eclipsi Sinica liber singularis Sinorum de eclipsi solis quae Christo in crucem acto facta esse creditur indicium examinans et momento suo ponderans . . . accedunt praeceptionum de lingua Sinica. 4to. Regiomonte, 1718

[Bayes, -]:

An introduction to the doctrine of fluxions, and defence of the mathematicians against the objections of the author of the Analyst.

Svo. London, 1736

Bayle (Pierre):

— : Miscellaneous Reflections occasion'd by the Comet which appear'd in December 1680. Chiefly tending to explode popular superstitions. . . . Translated from the French. To which is added the author's Life.

2 vols. 8vo. London, 1708

4to, München, 1876

--- ; ,See also Comets (dissertation on).

Bayly (William):

The original astronomical observations made in the course of a voyage to the Northern Pacific Ocean, for the discovery of a north-east or north-west passage . . . . in His Majesty's ships the *Resolution* and *Discovery*, in the years 1776–1780, by Captain James Cook and Lieutenant James King.

4to. London, 1782

Bayma (Joseph):

The elements of molecular mechanics. 8vo. London, 1866

Bazley (Thomas Sebastian):

The stars in their courses. A two-fold series of maps, with a catalogue, showing how to identify, at any time of the year, all stars down to the 5.6 mag. inclusive of Heis, which are clearly visible in English Latitudes. fol. London, 1878

Beardmore (Nathaniel):

Manual of hydrology: containing (1) Hydraulic and other tables; (2) Rivers, flow of water, springs, wells, and percolation; (3) Tides, estuaries, and tidal rivers; (4) Rainfall and evaporation.

8vo. London, 1862

Beaufoy (Mark):

Nautical and hydraulic experiments, with numerous scientific miscellanies. Vol. 1. 4to. London, 1834

Beaumont (G.):

Fixed stars, or an analyzation and refutation of astrology.

Second edition. 121mo. London, 1814

Béchaux (A. H. L. S.):

Mechanical Geometry: an application to geometry of some propositions in statics.

8vo. London, 1869

Becka (Gottlieb):

\*Über die Bahn des Kometen II vom Jahre 1873.

8vo. Wien, 1878

Becker (E.):

\*Tafeln der Amphitrite, mit Berücksichtigung der Störungen durch Jupiter, Saturn und Mars. 4to. Leipzig, 1870

Becker (Ludwig):

Untersuchungen über die allgemeinen Störungen der Feronia. Inaugural-Dissertation. 4to. Bonn, 1882

Beckett (Edmund):

---: Astronomy without mathematics. Fourth edition.

8vo. London, 1867

— : Ditto. Sixth edition, revised for the results of the transit of Venus.

8vo. London, 1876

Beckett (Joseph):

Elements & practice of mensuration and land surveying.

8vo. London, 1804

Bedford (Arthur):

Horæ mathematicæ vacuæ, or a treatise of the golden and ecliptic numbers, containing a method for finding the change of the Moon [and] the eclipses; of the fractions of square and cube roots.

8vo. London, 1743

Bedford (James):
—: New theories of the universe, explaining how Sun, Moon,
stars, &c., are formed. 8vo. Liverpool, 1854
: The Bedfordian system of astronomy: being new theories
of the universe, explaining how Sun, Moon, stars, comets, &c., are formed Third edition. 8vo. London, 1881
Beebe (Lewis H.):
The dense water of the ocean; its rivers and currents.
8vo. 1884
Beer (Wilhelm) und Johann Heinrich Mädler:
: Der Mond nach seinen kosmischen und individuellen Verhält-
nissen oder Allgemeine vergleichende Selenographie. Mit
besondrer Beziehung auf die von den Verfassern herausgege- bene Mappa Selenographica. 4to. Berlin, 1837
- : Mappa Selenographica quatuor sectionibus con-
structa et delineata. 4 sheets mounted in 1. Berolini, 1834
—: Ditto. Second edition. 4 sheets.
—: Ditto. Third edition. 4 sheets.
: General-Karte der sichtbaren Seite der Mondoberflache.
I sheet.  Berlin, 1837
: Beiträge zur physischen Kenntniss der himmlischen Körper im Sonnensysteme. 4to. Weimar, 1841
Bégat (P.):
Exposé des opérations géodésiques relatives aux travaux
hydrographiques exécutés sur les côtes septentrionales de
France par les Ingénieurs Hydrographes de la Marine.
4to. Paris, 1839
Behrmann (Carl):  —: Beobachtungen über die Sternschnuppen, angestellt auf den
Sternwarten zu Göttingen und Münster, nebst daraus
abgeleiteten Resultaten. Inaugural-Dissertation.
8vo. Göttingen, 1866
: Atlas des südlichen gestirnten Himmels. Darstellung der
zwischen dem Südpol und dem 20 Grad südlicher Abweich-
ung mit blossen Augen sichtbaren Sterne nach ihren
wahren, unmittelbar vom Himmel entnommenen Grössen.
wahren, unmittelbar vom Himmel entnommenen Grössen.  fol. Leipzig, 1874  —: Stern-Verzeichniss.  8vo. Leipzig, 1874
wahren, unmittelbar vom Himmel entnommenen Grössen.  fol. Leipzig, 1874
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874 —: Stern-Verzeichniss. 8vo. Leipzig, 1874 Beilby, J. Wood: [——]: Auriferous drifts in Australasia, or the cause and its con-
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874 —: Stern-Verzeichniss.  8vo. Leipzig, 1874  Beilby, J. Wood:  [——]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874
wahren, unmittelbar vom Himmel entnommenen Grössen.  fol. Leipzig, 1874
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874 —: Stern-Verzeichniss.  Beilby, J. Wood: [——]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts.  Svo. Melbourne, 1868 [——]: The true theory of the earth, and philosophy of the pre-
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874  —: Stern-Verzeichniss. Svo. Leipzig, 1874  Beilby, J. Wood:  [—]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts.  Svo. Melbourne, 1868  [—]: The true theory of the earth, and philosophy of the predicted end specially considered as elucidating the origin and distribution of auriferous deposits in Australasia
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874  —: Stern-Verzeichniss. Svo. Leipzig, 1874  Beilby, J. Wood:  [—]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts.  Svo. Melbourne, 1868  [—]: The true theory of the carth, and philosophy of the predicted end specially considered as elucidating the origin and distribution of auriferous deposits in Australasia and elsewhere. By 'Research.' Svo. Edinburgh, 1869
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874  —: Stern-Verzeichniss. Svo. Leipzig, 1874  Beilby, J. Wood:  [—]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts.  Svo. Melbourne, 1868  [—]: The true theory of the carth, and philosophy of the predicted end specially considered as elucidating the origin and distribution of auriferous deposits in Australasia and elsewhere. By 'Research.' Svo. Edinburgh, 1869  —: Reasons suggestive of mining on physical principles for
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874  —: Stern-Verzeichniss. Svo. Leipzig, 1874  Beilby, J. Wood:  [—]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts. Svo. Melbourne, 1868  [—]: The true theory of the earth, and philosophy of the predicted end specially considered as elucidating the origin and distribution of auriferous deposits in Australasia and elsewhere. By 'Research.' Svo. Edinburgh, 1869  —: Reasons suggestive of mining on physical principles for gold and coal: a review of the assumptions of geologists.
wahren, unmittelbar vom Himmel entnommenen Grössen. fol. Leipzig, 1874  —: Stern-Verzeichniss. Svo. Leipzig, 1874  Beilby, J. Wood:  [—]: Auriferous drifts in Australasia, or the cause and its continuity of the great geological convulsions, and the theory of the origin and position of auriferous drifts.  Svo. Melbourne, 1868  [—]: The true theory of the carth, and philosophy of the predicted end specially considered as elucidating the origin and distribution of auriferous deposits in Australasia and elsewhere. By 'Research.' Svo. Edinburgh, 1869  —: Reasons suggestive of mining on physical principles for

Beima (Elto Martinus):

Beima (Eito Martinus):
De annulo Saturni. 4to. Lugduni Batavorum, 1842
Beiträge zur meteorologischen Optik und zu verwandten Wissenschaften:
Herausgegeben von J. A. Grunert. Band 1, Heft 1-4. 8vo. Leipzig, 1848-50
Belcher (Edward):
The last of the Arctic Voyages: being a narrative of the
expedition in H.M.S. Assistance in search of Sir
John Franklin, during 1852-54, with notes on the natural
history by Sir J. Richardson, R. Owen, T. Bell, J. W.
Salter and L. Reeve. 2 vols. roy. 8vo. London, 1855
Belfast Natural History and Philosophical Society:
Proceedings, 1871–83. 8vo. Belfast, 1873–83
Benson (Lawrence Sluter):
: Geometrical disquisitions. 8vo. London, 1864
-: The truth of the bible upheld; or truth v. science. 'My
visit to the Sun.' 8vo. London, 1864
: The truth of the bible upheld, or truth vs. science.
8vo. Augusta, Ga., 1866
- : A dissertation on the principles and science of Geometry.
8vo. New York, 1871
: Replies to E. T. Quimby, W. Chauvenet, R. D.
Allen, and A. T. Bledsoe. 8vo. New York, 1872
-: Notes on the first book of Benson's Geometry, and concern-
ing the circle. 8vo. New York, 1873
—: Mathematics in a dilemma. 8vo. New York, 1879
: Geometry as a science. 8vo. New York, 1882
: Facts and figures for mathematicians. 8vo.
Benthin (J.) und Carl Bruhns:
Lehrbuch der Sternkunde in entwickelnder Stufenfolge
mit einem Vorworte von C. Bruhns. Svo. Leipzig, 1872
Bentley (C. S.):
A new theory of the tides. fol. 1879
Bentley (John):
A historical view of the Hindu Astronomy, from the earliest
dawn of that science in Iudia, to the present time
To which are added: 1. Hindu tables of equations. 2. Re-
marks on the Chinese Astronomy. 3. The Zodiacs of
Dendera. 8vo. London, 1825
Benzenberg (Johann Friedrich):
: Die Sternschnuppen sind Steine aus den Mondvulkanen.
8vo. Bonn, 1834
— : Versuche über die Umdrehung der Erde.
8vo. Düsseldorf, 1845
Berg (Friedrich Wilhelm):
Ueber die Berechnung der Störungen. [Inaugural-Disserta-
tion.] 8vo. Dorpat, 1869
Develop (TIT O)
Bergen (W. C.):
Bergen (W. C.):  ——: Spherical tables and diagram, with their application to

Bergen (W. C.)—continued. great circle sailing, and various problems in Nautical Astronomy.  8vo. London, 1857
nomy Svo London 1877
nomy.
: Great circle tables, and use of great circle charts.  8vo. Blyth, 1859
Bergen, Observatorium:
- : Indbergtning 1868, 1869, 1870, af J. J. Astrand.
- : Indberetning 1868, 1869, 1870, af J. J. Åstrand.  [Swedish and German.] 4to. Bergen, 1871
—: Indberetning om Bergens Observatorium i 1872, af J. J.
Astrand. 4to. Bergen : Katalog over Bergens Observatoriums Bibliothek.
: Katalog over Bergens Observatoriums Bibliothek.  8vo. Bergen, 1879
Bergman (Johann Friedrich):
Dissertatio de formulis refractionis astronomicæ. [Inaugural
Dissertation.] 4to. Lundæ, 1817
[Berkeley (George), Bishop of Cloyne]:
: The analyst, or a discourse addressed to an infidel mathema-
tician , by the author of the 'minute philosopher.'
8vo. London, 1734 : A defence of free-thinking in mathematics, in answer to a
pamphlet of Philalethes Cantabrigiensis, intituled, Geo-
metry no friend to infidelity by the author of the
'minute philosopher.' 8vo. London, 1735
: See Jurin (Dr.)
Berlin, Astronomisches Jahrbuch:
— : Für 1776–1886. 104 vols. 8vo. Berlin, 1774–1884 — : Supplement-Bände 1–4. Sammlung astronomischer Ab-
handlungen, Beobachtungen und Nachrichten, Herausge-
geben von J. E. Bode. 4 vols. 8vo. Berlin, 1793–1808  — : Erläuterungen, von J. E. Bode. 8vo. Berlin, 1817  — : Namen- und Sach-Register 1776 bis 1829.
: Erläuterungen, von J. E. Bode. 8vo. Berlin, 1817
: Namen- und Sach-Register 1776 bis 1829. 8vo. Berlin, 1829
: Circular, No. 44-229. Svo. Berlin, 1876-84
Berlin, Commission für die Vorberathung der für die Beo-
bachtung des Venusdurchgangs von 1874 zu ergreifenden
Maassregeln. Verhandlungen, 1869, Oct. 25–29. fol. Berlin
: Protocolle der zweiten Conferenz, 1871, März 20-28.
fol. Berlin
Berlin, Gewerbeausstellung im Jahre 1879. Bericht über die
wissenschaftliche Instrumente Herausgegeben von L. Loewenherz. 8vo. Berlin, 1880
•
Berlin, Königliche Akademie der Wissenschaften:  ——: Miscellanea Berolinensia ad incrementum scientiarum, ex-
scriptis Societati Regiæ Scientiarum exhibitis edita.
3 parts, 4to. Berolini, 1710 (1723-1727)
: Abhandlungen, 1822-48, 1850-83. 4to. Berlin, 1825-84
— : Verzeichniss der Abhandlungen, 1710–1870. 8vo. Berlin, 1871
: Inhaltsverzeichniss der Abhandlungen, 1822-72
8vo. Berlin, 1873

Berlin, Königliche Akademie der Wissenschaften-cont.
Bericht über die zur Bekanntmachung geeigneten Verhand-
lungen, 1836-55 : Monatsberichte, 1856-81.  12 vols. 8vo. Berlin, 1836-55 26 vols. 8vo. Berlin, 1856-82
Monatsherichte 1856-81, 26 vols, 8vo. Berlin, 1856-82
- : Monatsberichte. Register vom Jahre 1836 bis 1858.
8vo. Berlin, 1860
0 70 31 0
: vom Jahre 1859 bis 1873. 8vo. Berlin, 1875
— : Sitzungsberichte, Jahrgang 1882-84.
8vo. Berlin, 1882–84
: Recueil de tables astronomiques (avec catalogue des étoiles
fixes). 3 vols. 8vo. Berlin, 1776
: Dissertations sur la théorie des Comètes qui ont concourn
au prix proposé par l'Académie pour l'année 1777,
& adjugé en 1778. 4to. Utrecht, 1780
— : Akademische Sternkarten für den Gürtel des Himmels von
15° südlicher bis 15° nördlicher Abweichung, nach Bessel's
Vorschlag entworfen von verschiedenen Astronomen.
fol, Berlin, 1859
- : Cataloge zu den 24 Stunden der Akademischen Stern-
karten für 15° südlicher bis 15° nördlicher Abweichung,
karten für 15 südlicher bis 15 nordhöher 220 28]
bearbeitet von verschiedenen Astronomen [1830-38].
fol. Berlin, 1859
Berlin, Königl. Preuss. Geodätisches Institut: Publicationen:
: Zur Entstehungsgeschichte der europäischen Gradmessung.
(Von J. J. Baever.) 4to Berlin
—: Astronomisch-Geodätische Arbeiten, 1870-71. Herausg.
von C. Bruhns. 4to. Leipzig, 1871–73
von C. Bruhns. 4to. Leipzig, 1871–73 : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867.
von C. Bruhns.
von C. Bruhns. 4to. Leipzig, 1871–73
von C. Bruhns.
von C. Bruhns.
von C. Bruhns.
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867.  Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879–82.  4to. Berlin, 1881–83  : Bestimmung der Längendifferenz zwischen Berlin und Wien Von W. Förster und E. Weiss.  4to. Leipzig, 1871  : Die Ausdehnungscoefficienten der Küstenvermessung, von A. Westphal.  1 to. Berlin, 1881  1 Das Mittelwasser der Ostsee bei Swinemünde.  4to. Bearbeitet
von C. Bruhns.
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867. Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879–82.  4to. Berlin, 1881–83
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867. Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879-82.  4to. Berlin, 1881-83
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867. Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879-82.  4to. Berlin, 1881-83
von C. Bruhns.
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867. Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879–82.  4to. Berlin, 1881–83
von C. Bruhns.
von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1872, 1869, 1867. Herausg. von C. Bruhns.  : Astronomisch-Geodätische Arbeiten, 1879–82.  4to. Berlin, 1881–83

— : Astronomische Beobachtungen . . . . herausgegeben von J. F. Encke. Band 1-4. fol. Berlin, 1840-57

- : Uebersicht der bei dem meteorologischen Institute zu Berlin gesammelten Ergebnisse der Wetterbeobachtungen.... 1885 4to. Berlin - : Uebersicht der Witterung im nördlichen Deutschland,

fol. Berlin, 1840-57

Berlin, Königliche Sternwarte:

—: Hülfstafeln, see Förster (W.) Berlin, Meteorologisches Institut:

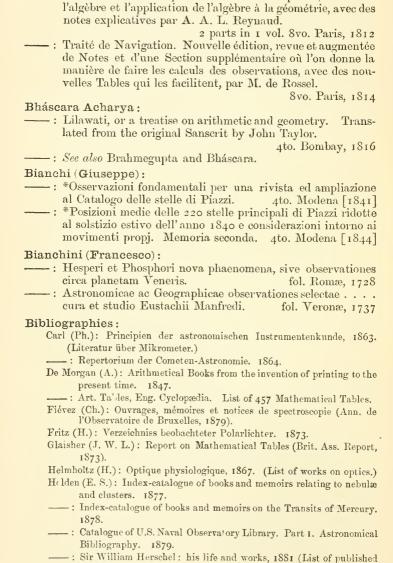
1856–58, 1860. 4to. Berlin
Berlin, Physikalische Gesellschaft:
— : Die Fortschritte der Physik in den Jahren 1855-80. Band
11–33, 36. Svo. Berlin, 1858 83
-: Namen- und Sach-Register. Band 1-20. Svo. Berlin, 1872
: Verhandlungen, 1882-83. Band 1. Svo. Berlin, 1882-83
Bernaerts (Gustave Louis):
: *Note sur la nature du Soleil. Svo. Bruxelles, 1870 : Notice biographique de. Svo.
Bernoulli (Daniel):
Hydrodynamica, sive de viribus et motibus fluidorum com-
mentarii. 4to. Argentorati, 1738
Bernoulli (Jacobus):
—: Conamen novi systematis cometarum, pro motu eorum sub
calculum revocando & apparitionibus prædicendis.
12mo. Amstelædami, 1682
——: Dissertatio de gravitate Ætheris. 8vo. Amstelædami, 1683
— : Ars conjectandi; opus posthumum. Accedit tractatus de
seriebus infinitis, et epistola Gallicè scripta de Indo pilæ
reticularis. 4to. Basileae, 1713 ——: Opera. 2 vols. 4to. Genevae, 1744
: The doctrine of permutations and combinations, being an
essential and fundamental part of the doctrine of chances
published by Francis Maseres 8vo. London, 1795
Bernoulli (Joannes):
Opera omnia, tam antea sparsim edita, quam hacteuus
inedita. 4 vols. 4to. Lausannæ & Genevæ, 1742
Bernoulli (Joannes) et G. W. Leibnitz:
Commercium philosophicum et mathematicum, 1694-1716.
2 vols. 4to. Lausanna, 1745
Bernoulli (Jean), junior:  —: Recueil pour les Astronomes. 3 vols. 8vo. Berlin, 1771–76
: A sexcentenary table, exhibiting at sight the result of any
proportion where the terms do not exceed 600 seconds or 10
minutes; with precepts and examples. 4to. London, 1779
Béron (Pierre):
- : Texte des explications des faits célestes et géologiques con-
tenus dans l'atlas cosmo-biographique. 4to. Paris, 1858
- : Réforme fondamentale des sciences physiques produite par
la découverte de l'origine des faits cosmiques. Panépistème,
contenant l'origine des faits cosmiques, des quatre systèmes
1)

Béron (Pierre)—continued.
des physiciens, des quatre religions fondamentales, et de la
pesanteur. 8vo. Paris, 1861
: Électrostatique, contenant l'explication des faits électriques
et électrochimiques de toutes les sciences. 8vo. Paris, 1861
— : Chronologie du monde. 8vo. Paris, 1862
: La découverte de l'origine de la pesanteur démontrée.
8vo. Paris, 1863
: Météorologie simplifiée. 8vo. Paris, 1863
: Le grand soleil visible au centre du système du monde.
8vo. Paris, 1866: La physique céleste. 8vo. Paris, 1866
: Taches solaires, et périodicité de leur nombre : faisant partie
de la physique céleste, servant à montrer l'état physique du
soleil. 8vo. Paris, 1866
: Physique céleste: contenant le système du monde (le sys-
tème planétaire; l'origine de la terre et de l'homme).
3 vols. 8vo. Paris, 1866–67
Berosus Babilonicus: Hemicyclium see Valderus and others.
Berry (Calixte):
Théorie complète des occultations, à l'usage spécial des officiers
de marine et des astronomes.  4to. Paris, 1880
• /
Bertrand (Joseph):
: *Éloge historique d'Urbain-Jean-Joseph Le Verrier.
4to. Paris, 1880 ——: Les Fondateurs de l'Astronomie moderne. Copernic—Tycho
Brahé—Kepler—Galilée—Newton. 8vo. Paris, n.d.
Bessel (Friedrich Wilhelm):
: Fundamenta Astronomiae pro anno MDCCLV deducta ex
observationibus viri incomparabilis James Bradley in specula Astronomica Grenovicensi per annos 1750–1762 institutis.
Astronomica Grenovicensi per annos 1750–1702 institutis. fol. Regiomonti, 1818
: *Untersuchungen über die Länge des einfachen Secunden-
pendels. 4to. Berlin, 1828
- : Tabulae Regiomontanae reductionum observationum astro-
nomicarum, ab anno 1750 usque ad annum 1850 computæ.
8vo. Regiomonti Prussorum, 1830
: *Versuche über die Kraft mit welcher die Erde Körper von
verschiedener Beschaffenheit anzieht. 4to. Berlin, 1832
: *Bestimmung der Länge des einfachen Secundenpendels für
Berlin. 4to. Berlin, 1837
- : *Schreiben vom 10. Oct. 1838 an Hrn. v. Buch [on the
parallax of 61 Cygni]. 8vo. Berlin, 1838
: Darstellung der Untersuchungen und Maassregeln, welche,
in den Jahren 1835 bis 1838, durch die Einheit des Preus-
sischen Längenmaasses veranlasst worden sind.
4to. Berlin, 1839
-: Astronomische Untersuchungen. Band 1, 2, in 1 vol.
4to. Königsberg, 1841–42
: Populäre Vorlesungen über wissenschaftliche Gegenstände Nach dem Tode des Verfassers herausgegeben von
U. C. Schumecher 10de des Verlassers herausgegeben von

Bessel (Friedrich Wilhelm) -continued.
: *Verzeichniss sämmtlicher Werke, Abhandlungen, Aufsätze
und Bemerkungen von F., W., B., Versehen von Dr.
A. L. Busch. 4to. Königsberg, 1849
: *Refraction tables, modified and expanded.
4to. London, 1855 ——: Refraction tables. The form employed at the Royal Ob-
servatory, Cape of Good Hope. 4to.
-: Abhandlungen Herausgegeben von Rudolf Engel-
mann. 3 vols. 4to. Leipzig, 1875–76
Band I. Bewegungen der Körper im Sonnensystem; sphärische Astronomie.
2. Theorie der Instrumente; Stellarastronomie; Mathematik.
3. Geodäsie; Physik; Verschiedenes; Literatur.
: Recensionen. Herausgegeben von Rudolf Engelmann. 8vo. Leipzig, 1878
: Briefwechsel, see Gauss und Bessel, Olbers und Bessel. : See also Königsberg, Sternwarte; Weisse (M.)
Bessel (Friedrich Wilhelm) und J. J. Baeyer:
Gradmessung in Ostpreussen, und ihre Verbindung mit
Gradmessung in Ostpreussen, und ihre Verbindung mit Preussischen und Russischen Dreiecksketten.
4to. Berlin, 1838
Betham (John): A new and certain method of finding the latitude by an alti-
tude of the Pole Star. 8vo. Bombay, 1829
Betham (William):
Detham (william).
*On an astronomical instrument of the ancient Trish.
*On an astronomical instrument of the ancient Irish.  4to, Dublin, 1836
4to. Dublin, 1836 Bethune (C. R. Drinkwater):
4to. Dublin, 1836 Bethune (C. R. Drinkwater):
Bethune (C. R. Drinkwater):  ——: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  ——: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  ——: *Note on a method of reducing the apparent distance of the
Bethune (C. R. Drinkwater):  ——: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872] : *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  8vo. London  Bettinus (Marius):
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  8vo. London  Bettinus (Marius):  —: A piaria vniversæ philosophiæ mathematicæ, in quibus Para-
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance. 8vo. London  Bettinus (Marius):  —: Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios tra-
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  8vo. London  Bettinus (Marius):  —: Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance. 8vo. London  Bettinus (Marius):  —: Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  fol. Bononiæ, 1642
4to. Dublin, 1836  Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  16mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance. 8vo. London  Bettinus (Marius):  —: Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  fol. Bononiæ, 1642  —: Ærarium philosophiæ mathematicæ, in quo elementa philo-
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Svo. London  Bettinus (Marius):
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Svo. London  Bettinus (Marius):
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance. Svo. London  Bettinus (Marius):
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Sevo. London  Bettinus (Marius):  **
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Sevo. London  Bettinus (Marius):  **Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et nona pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  **Frarium philosophiæ mathematicæ, in quo elementa philosophiæ geometricæ de planis, curuis, & solidis figuris applicata et ornata methodo iucundiore ac breuiore in tres tomos distributa sunt.  **Bézout (Etienne):  **Cours de mathématiques à l'usage de la Marine et de l'Ar-
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Sevo. London  Bettinus (Marius):  **Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  **Frarium philosophiæ mathematicæ, in quo elementa philosophiæ geometricæ de planis, curuis, & solidis figuris applicata et ornata methodo iucundiore ac breuiore in tres tomos distributa sunt.  **Bézout (Etienne):  **Cours de mathématiques à l'usage de la Marine et de l'Artillerie. Première partie, Arithmétique.
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Svo. London  Bettinus (Marius):
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  *Sevo. London  Bettinus (Marius):  ** Apiaria vniversæ philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  ** Frarium philosophiæ mathematicæ, in quo elementa philosophiæ geometricæ de planis, curuis, & solidis figuris applicata et ornata methodo iucundiore ac breuiore in tres tomos distributa sunt.  ** Bézout (Étienne):  ** Cours de mathématiques à l'usage de la Marine et de l'Artillerie. Première partie, Arithmétique.  ** 12mo. A vignon, 1811  ** Traité d'arithmétique avec des notes et des tables de
Bethune (C. R. Drinkwater):  —: Tables for travellers, adapted to the pocket or sextant case.  I6mo. London [1872]  —: *Note on a method of reducing the apparent distance of the moon from sun or star to the true distance. 8vo. London  Bettinus (Marius):  —: Apiaria vniverse philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  fol. Bononia, 1642  —: Ærarium philosophiæ mathematicæ, in quo elementa philosophiæ geometricæ de planis, curuis, & solidis figuris applicata et ornata methodo iucundiore ac breuiore in tres tomos distributa sunt. 3 vols. 4to. Bononiæ, 1648  Bézout (Étienne):  —: Cours de mathématiques à l'usage de la Marine et de l'Artillerie. Première partie, Arithmétique.  ——: 12mo. Avignon, 1811  ——: Traité d'arithmétique avec des notes et des tables de logarithmes par A. A. L. Reynaud. Huitième édition.  8vo. Paris, 1816
#Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Note on a method of reducing the apparent distance of the moon from sun or star to the true distance.  **Sev. London  Bettinus (Marius):  **Explain a vniverse philosophiæ mathematicæ, in quibus Paradoxa, et noua pleraque Machinamenta ad vsus eximios traducta, & facillimis demonstrationibus confirmata. 2 vols. in 1.  **Frarium philosophiæ mathematicæ, in quo elementa philosophiæ geometricæ de planis, curuis, & solidis figuris applicata et ornata methodo iucundiore ac breuiore in tres tomos distributa sunt.  **Bézout (Étienne):  **Cours de mathématiques à l'usage de la Marine et de l'Artillerie. Première partie, Arithmétique.  **Izmo. A vignon, 1811**  **Traité d'arithmétique avec des notes et des tables de logarithmes par A. A. L. Reynaud. Huitième édition.

sphérique. Notes sur la géométrie . . . . par A. A. L. Reynaud. Seconde édition. 8vo. Paris, 1812 ---: : Cours de mathématiques . . . . Troisième partie, contenant

Bézout (Etienne)-continued.



Houzeau (J. C.): Catalogue des ouvrages d'astronomie et de météorologie

dans les Bibliothèques de la Belgique. 1878.

writings of W. H.)

Bibliographies-continued.

Houzeau (J. C.): Répertoire des constantes de l'ast onomie (Ann. de l'Observatoire de Bruxelles, N.S., Tome I).

: Vade-mecum de l'astronome. 1882.

— et Lancaster: Bibliographie générale de l'astronomie. Vol. 2. Mémoires dans les Collections Académiques. 1882.

Knobel (E. B.): Reference catalogue of astronomical papers and researches (Mon. Nots. of R A.S., Vol. 36).

-: Chronology of star catalogues (Mem. R.A S., Vol. 43).

Lalande (J. de): Bibliographie Astronomique. 1803.

London, Royal Society: Catalogue of Scientific papers, 1800-1873. 8 vols.

Merriman (M.): List of writings relating to the Method of Least Squares.

1877.

Ranyard (A. C.): Total solar eclipses (Mem. R.A.S., Vol. 41).

Reuss (J. D.): Repertorium Commentationum a Societatibus Litterariis editarum. Vol. 5, Astronomia. 1804.

Roscoe (H. E.): Spectrum Analysis, 1870. List of Memoirs, &c., on Spectrum Analysis.

Schellen (H.): Spectrum Analysis, 1872. List of works on spectrum analysis.

Pulkowa, Librorum in Bibliotheca Speculæ Pulcovensis Catalogus. Struve und Lindemann, 1860–80.

Weidler (J. F.): Bibliographia Astronomica. 1755.

#### Bicchierai (Zanobi):

\*Ricordo del Prof. O. F. Mossotti

8vo. Firenze, 1863

### Biden (W. Downing):

Rules, formulæ and tables for the valuation of estates in possession or in reversion.

8vo. London, 1861

# Bienaymé (J. J.):

\*Sur la probabilité des erreurs d'après la méthode des moindres carrés.

4to. Paris, 1852

#### Bierens de Haan (David):

\*Notice sur des tables logarithmiques Hollandaises.

4to. Rome, 1874

## Billings (Joseph):

Geographical and astronomical expedition to the northern parts of Russia. See Sauer (Martin).

### Billingsley (Case):

The longitude at sea not to be found by firing guns, nor by the most curious spring clocks or watches, but the only true method for discovering that valuable secret by the Sun, Moon, or stars, and an exact Time-keeper.

8vo. London, 1714

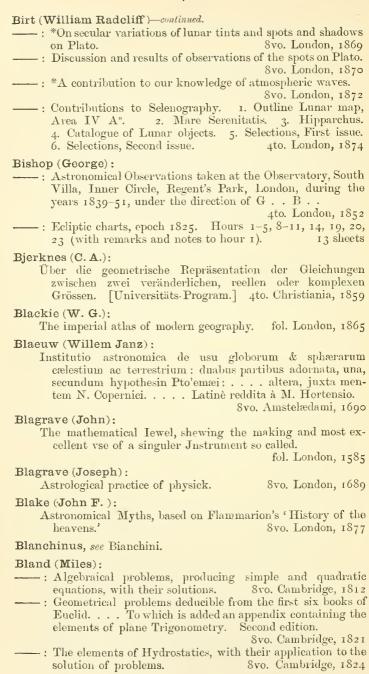
#### Binet (Jacques Philippe Marie):

-----: \*Mémoire sur la détermination des orbites des Planètes et des Comètes. 4to. Paris, 1830

: \*Mémoire sur les intégrales définies Eulériennes, et sur leur application à la théorie des suites, ainsi qu'à l'évaluation des fonctions de grands nombres. 4to. Paris, 1840

many to the many the same of t
Bion (Nicolas):
: L'usage des astrolabes, tant universels que particuliers.
12mo. Paris, 1702
- : The construction and principal uses of mathematical in-
struments Translated from the French by Ed-
mund Stone. fol. London, 1723
— : Ditto. Second edition. fol. London, 1758
Biot (Édouard):
: *Catalogue des comètes observées en Chine, depuis l'an 1230
jusqu'à l'an 1640 de notre ère (et sur les anciennes appar-
ences de la Comète de Halley). 8vo. Paris, 1843
: *Note sur la direction de l'aiguille aimantée en Chine, et sur
les aurores boréales observées dans ce même pays.
4to. Paris, 1844
: *Catalogue général des étoiles filantes et des autres météores
observés en Chine pendant vingt-quatre siècles.
4to. Paris, 1846
Biot (Jean Baptiste):
: Analyse du traité de mécanique céleste de P. S. Laplace.
8vo. Paris, An IX [1801]
: Traité élémentaire d'astronomie physique avec des
additions relatives à l'astronomie nautique par M. de
Rossel , seconde édition. 3 vols. 8vo. Paris, 1810–11
: Recherches expérimentales et mathématiques sur les mouve-
mens des molécules de la lumière autour de leur centre
de gravité. 4to. Paris 1814
: Traité de physique expérimentale et mathématique.
4 vols. 8vo. Paris, 1816
4to. Paris, 1831
: *Astronomie physique.—Sur le météore périodique du 13
Novembre. 4to. Paris, 1836
: *Mémoire sur la latitude de l'extrémité australe de l'arc
méridien de France et d'Espagne. 4to. Paris, 1843
: *Sur un traité Arabe relatif à l'Astronomie.
4to. (Paris) 1843
: *Précis de l'histoire de l'Astronomie Planétaire, écrit à
l'occasion de la découverte de M. Le Verrier.
4to. Paris, 1847
: *Sur trois observations d'Hipparque. 4to. Paris, 1848
: Notices of astronomical works: five papers.
4to. Paris, 1848–58
: *Résumé de chronologie astronomique. 4to. Paris, 1849
: Elementary chapters in astronomy, from the 'traité élé-
mentaire d'astronomie physique' of Biot. Edited by the
Rev. Harvey Goodwin. 8vo. Cambridge, 1850
: *Sur un calendrier astronomique et astrologique trouvé à
Thèbes en Égypte Deuxième et dernier mémoire.
4to. Paris, 1853
: *Recherches de quelques dates absolues, qui peuvent se
conclure des dates vagues inscrites sur des monuments
Égyptiens. 4to. Paris, 1853

Biot (Jean Baptiste)—continued.
: *Nouvelles études sur les réfractions atmosphériques.
4to. Paris, 1854
: Remarques relatives à la communication de M. W. Struve [mesure d'un arc du méridien]. 4to. Paris, 1857
—: Mélanges scientifiques et littéraires. 3 vols. 4to. Paris, 1858
: *Précis de l'Histoire de l'Astronomie chinoise.
4to. [Paris] 1861
: Discours prononcé aux obsèques de M. le Marquis de La-
place. 4to.
Biot (Jean Baptiste) et Dominique François Arago:
Recueil d'Observations géodésiques, astronomiques et phy- siques exécutées en Espagne, en France, en Augleterre
et en Écosse pour déterminer la variation de la pesanteur et
des degrés terrestres sur le prolongement du méridien de
Paris, faisant suite au troisième volume de la Base du
système métrique [de Delambre et Méchain].
4to. Paris, 1821 Birch (Thomas):
An account of the life of John Ward, LL.D., Professor of
Rhetoric in Gresham College. 8vo. London, 1766
Bird (Alfred):
*An account of the water-barometer. 8vo. London, 1865
Bird (John):
: The method of dividing astronomical instruments.
4to. London, 1767
: The method of constructing mural quadrants, exemplified by a description of the brass mural quadrant in the Royal
Observatory at Greenwich. 4to. London, 1768
Birks (Anthony and John):
Arithmetical collections and improvements, being a complete
system of practical arithmetic. 8vo. London, 1766
Birmingham (J.):
*The red stars: observations and catalogue. 4to. Dublin, 1877
Birmingham Philosophical Society:
Proceedings. Session 1881-83. Vol. 3. 8vo. Birmingham
Birt (William Radeliff):
: The sailor's guide; or short and easy rules for vessels in
revolving storms Third edition. 8vo. London, 1857 —: *On the mid-day illumination of the lunar craters Gemi-
nus, Burckhardt, and Bernoulli. 8vo. London, 1860
-: *Contribution to a report on the physical aspect of the
moon. 8vo. London, 1861
-: *On a group of lunar craters imperfectly represented in
lunar maps. 8vo. London, 1862  : The manifestation and operation of volcanic forces in
modifying the Moon's surface. 8vo. Edgware, 1862
: *Plato. A few further contributions to a knowledge of its
physical aspect; being reminiscences of a visit to Hartwell
in April and May 1862.



Blebelius (Thomas):

De sphæra et primis astronomiæ rudimentis, libellus ad usum scholarum maximè accommodatus. 8vo. [Witebergæ] 1588

Block (Eugen):

Hilfstafeln zur Berechnung der Polaris-Azimute, zunächst mit Rücksicht auf die Zeitbestimmung im Verticale des Polarsterns. 4to. St. Petersburg, 1875

Blondel (François):

: Histoire du calendrier Romain qui contient son origine et les divers changemens qui luy sont arrivez. 4to. Paris, 1682 : Ditto.

Bloxam (John Charlton);

On the meteorology of Newport, in the Isle of Wight, as deduced from observations carried on during the sixteen years 1841-56.

4to. London, 1860

Blundevile (Thomas):

- : The theoriques of the seven planets, showing all their diverse motions, and all other accidents, called Passions, thereunto belonging . . . whereunto is added . . . . a breefe extract . . . of Maginus his theoriques, for the better understanding of the Prutenicall Tables . . . there is also hereto added the making, description, and use of two . . . instruments for sea-men . . . first invented by Doctor Gilbert. 4to. London, 1602

  : His exercises, containing eight treatises . . . . very neces-
- sarie to be read and learned of all young Gentlemen . . . desirous to haue knowledge as well in Cosmographie, Astronomie, and Geographie, as also in the art of Nauigation . . . . Fourth edition. 4to. London, 1613

Bode (Johann Elert):

: Représentation des Astres sur xxxIV planches en taille douce suivant l'Atlas céleste de Flams[t]eed. Édition de Paris . . avec une instruction sur la manière de s'en servir et un catalogue complet d'étoiles. obl. fol. Berlin, 1782
 : Anleitung zur allgemeinen Kenntniss der Erdkugel.

8vo. Berlin, 1786

— : Allgemeine Untersuchungen und Bemerkungen über die Lage und Austheilung aller bisher bekannten Planeten- und Kometenbahnen. 8vo. Berlin, 1791

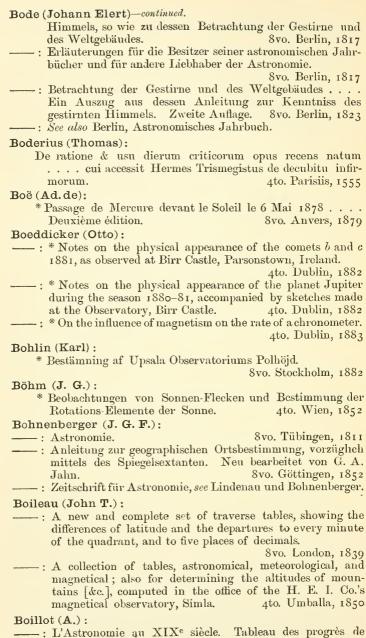
- : Allgemeine Beschreibung und Nachweisung der Gestirne nebst Verzeichniss der geraden Aufsteigung und Abweichung von 17240 Sternen. [German and French.] fol. Berlin, 1801

 Uranographia sive Astrorum descriptio viginti tabulisæneis incisa ex recentissimis et absolutissimis Astronomorum observationibus,
 fol. Berolini, 1801

----: Anleitung zur Kenntniss des gestirnten Himmels. Achte Auflage. 8vo. Berlin, 1806

- : See also Bremiker (C.)

- : Erläuterung der Sternkunde und der dazu gehörigen Wissensehaften. Dritte Auflage. 2 vols. 8vo. Berlin, 1808
- : Nachtrag zu seiner Anleitung zur Kenntniss des gestirnten



cette science depuis l'antiquité jusqu'à nos jours.

8vo. Paris, 1864

---: Traité élémentaire d'Astronomie à l'usage des Lycées et des

—: Novissimæ ephemerides motuum cælestium . . . . ad Meridianum Bononiæ supputatæ auctoribus Eustachio Manfredio . . . . (et sociis) . . . . ex anno 1715 in annum

---: Ephemerides motuum caelestium ex anno 1829 in annum 1844, ad meridianum Bononiae supputatae a Petro Catureglio

Bologna, Accademia delle Scienze dell' Istituto:

8vo. Paris, 1866

3 vols. 4to. Bononiæ, 1715-25

9 vols. bound in 3, 4to. 1828-43

4to. Bologna, 1857-61

Boillot (A.)—continued.

1750.

&c.

Bologna:

maisons d'éducation.

: Memorie. Tomo 8-12. 4to. Bologna, 1857-61
— : Indici generali. 4to. Bologna, 1864
—: Memorie, serie seconda. 10 vols. 4to. Bologna, 1862-70
— : Indici generali. 4to. Bologna, 1880
— : Memorie, serie terza. 10 vols. 4to. Bologna, 1871-79
——: Memorie, serie quarta. Tomo 1-3. 4to. Bologna, 1880-81
: Accademia delle Scienze dello Istituto di Bologna dalla
sua origine a tutto il 1880 [Lists of members, contents of
publications, &c.] Svo. Bologna, 1881
— : Rendiconto delle Sessioni, 1857-79. 8vo. Bologna, 1858-79
Bolzano (Bernard):
* Versuch einer objectiven Begründung der Lehre von der
Zusammensetzung der Kräfte. 4to. Prag, 1842
Bombay Branch of the Royal Asiatic Society:
Journal. Nos. 3 6, 11, 12: Vols. 7–16. 8vo. Bombay, 1842–83
Bombay, Magnetical and Meteorological Observatory:
——: Meteorological [and Magnetic] Observations made
1842-43. By George Buist. 2 parts 4to.
—: Report on the meteorological observations made at Colába,
Bombay, 1843. By George Buist. 4to.
—: Observations made in the years 1846-78.
4to. Bombay, 1849-81
—: Tracing of wind gauge curves. fol.
—: See also Chambers (C.)
Bonatus (Guido):
— : Guido bonatus de forliuio. Decem continens tractatus As-
tronomie (Johannis Angeli diligenti correctione).
4to. Auguste Vindelicorum, E. Ratdolt, 1491
—: De Astronomia tractatus x., vniuersum quod ad iudiciariam
rationem Natiuitatum, Aëris, Tempestatum attinet, compre-
hendentes. Adjectus est Cl. Ptolemæi liber fructus, cum
commentarijs Georgij Trapezuntij. fol. Basileæ, 1550
Boncompagni (Baldassarre):
: *Della vita e delle opere di Gherardo Cremonense, traduttore
del secolo duodecimo, e di Gherardo da Sabbionetta, astro-
nomo del secolo decimoterzo. 4to. Roma, 1851
-: *Della vita e delle opere di Guido Bonatti, Astrologo ed
Astronomo del sccolo decimoterzo. 8vo. Roma, 1851
, 0

Boncompagni (Baldassarre)—continued.
: *Delle versioni fatte da Platone Tiburtino, traduttore del
secolo duodecimo. 4to. Roma, 1851
Bond (George P.):
: *An account of the nebula in Andromeda. 4to. 1848
: *Some methods of computing the ratio of the distances of a
comet from the earth. 4to. Cambridge, 1848: *On the great comet of 1844-45. 4to. Cambridge, 1850
: *On the use of equivalent numbers in the method of least
squares. 4to. Cambridge, 1856
: *An account of Donati's Comet of 1858.
4to. Cambridge, 1858
: *On the relative brightness of the Sun and Moon, from ob-
servations made at the Observatory of Harvard College. 4to. Cambridge, 1861
: *On the results of photometric experiments upon the light
of the Moon and of the planet Jupiter, made at the Obser-
vatory of Harvard College. 4to. Cambridge, 1861
: *On the outline of the head of the comet of Donati. 8vo. 1861
: *Account of the Comet II, 1861, as seen at the Observatory
of Harvard College. 8vo. New Haven, 1861 —: Account of the great comet of 1858. 4to. Cambridge, 1862
: *On the new form of the achromatic object-glass introduced
by Steinheil. 8vo. Cambridge, 1863
: See also Harvard College Observatory.
Bond (Henry):
The longitude found; or a treatise, shewing an easie and
speedy way, as well by night as by day, to find the longi-
tude. 4to. London, 1676
Bond (William Cranch):
: *Description of the observatory at Cambridge, Massachu-
setts. 4to. 1848 —: *Description of the nebula about the star $\theta$ Orionis. 4to. 1848
- : See also Harvard College Observatory.
Bond (William Cranch and George P.):
On the rings of Saturn.  4to. [1851]
Bond (William Cranch), W. C. Bond, jun., and G. P. Bond:
*Occultations and eclipses observed at Dorchester and Cam-
bridge, Massachusetts. 4to. [1846]
Bonini (Piermaria):
Lycidario darithmetica. 8vo. Firenze, 1517
Dedicated to Filippo Strozzi.

Bonn, Sternwarte der k. Rheinischen Friedrich-Wilhelms Universität:

: Astronomische Beobachtungen . . . angestellt und herausgegeben von Friedrich Wilhelm August Argelander. Band 1-7. 4to. Bonn, 1846-69

Band I. Durchmusterung des nördlichen Himmels zwischen 45 und 80 Grad der Declination.

#### Bonn, Sternwarte der k. Rheinischen Friedrich-Wilhelms Universität-continued. Band 2. Durchmusterung der Himmelszone zwischen 15 und 31 Grad südlicher Declination. 3. Bonner Sternverzeichniss - 2°-+20°. + 20°-+41°. 22 +41°-+90°. 22 6. Mittlere Oerter von 33811 Sternen. 7. Eigenbewegungen von 250 Sternen; Tafeln zur Berechnung der Präcession; Verbesserungen und Bemerkungen; Mittlere Positionen von 160 Sternen; Beobachtungen über veränderliche Sterne. - : Anhang zum zweiten Bande, enthaltend Hülfstafeln zur leichtern Berechnung der Beobachtungen in den südlichen 8vo. Bonn, 1852 Zonen. — : See also Schönfeld (E.) Bonnycastle (John): ---: The scholar's guide to arithmetic. 12mo. London, 1780 ---: A treatise on plane and spherical trigonometry; with their most useful practical applications. 8vo. London, 1806 —— : Ditto. Second edition. 8vo. London, 1813 — : Ditto. Key. By G. Davies. 8vo. London, 1814 . An introduction to astronomy. In a series of letters from a preceptor to his pupil. In which the most useful and interesting parts of the science are clearly and familiarly explained . . . . Sixth edition. 8vo. London, 1811 ---: A treatise on Algebra, in practice and theory . . . . with

#### Boole (George):

---: A treatise on differential equations. 8vo. Cambridge, 1859

-: An introduction to Algebra, with notes and observations.

\_\_\_\_: A treatise on the calculus of finite differences.

notes and illustrations.

8vo. Cambridge, 1860

12mo. London, 1796

### Booth (Rev. James):

Fourth edition.

A treatise on some new geometrical methods.

2 vols. 8vo. London, 1873-77

2 vols. 8vo. London, 1813

### Borda (J. Ch. de):

— : Description et usage du cercle de réflexion, avec différentes méthodes pour calculer les observations nautiques.

4to. Paris, 1787

: Tables trigonométriques décimales, ou table des logarithmes, des sinus, sécantes et tangentes, suivant la division du quart de cercle en 100 degrés . . . . précédées de la table des logarithmes des nombres depuis dix mille jusqu'à cent mille . . . revues, augmentées et publiées par J. B. J. Delambre. 4to. Paris, An IX [1801]

# Bordeaux, Société des Sciences Physiques et Naturelles:

Mémoires. 10 vols. 8vo. Bordeaux, 1854-75
General Index in Vol. 10.

2me Série. Tome 1-5. 8vo. Bordeaux, 1876-83

### Borel, or Borellus (Pierre': De vero telescopii inventore, cum brevi omnium conspiciliorum historia . . . . accessit etiam centuria observationum microcospicarum. 3 parts in 1 vol. 4to. Hage-Comitum, 1655-56 Borelli (Giovanni Alfonso): ---: Theoricae Mediceorum planetarum ex causis physicis deductae. 4to. Florentiae, 1666 ---: Historia et meteorologia incendii Ætnæi anni 1669. 4to. Regio Julio, 1670 ---: De Motionibus naturalibus a gravitate pendentibus liber. 4to. Regio Julio, 1670 Börgen (Carl), see Göttingen, Sternwarte. Borron (Mrs.): A review of M. Le Verrier's exposition of his theory of his theoretic Neptune. 4to. [Shrewsbury], 1848 Bosanquet (James Whatman): \*Chronological remarks on the history of Esther and Ahasuerus, or 'Atossa Tanu-Axares. 8vo. London, 1876 Boscovich (Ruggiero Giuseppe): ---: De Lunæ Atmosphæra dissertatio. 4to. Romæ, 1753 - : De inæqualitatibus quas Saturnus et Jupiter sibi mutuo videntur inducere, præsertim circa tempus conjunctionis. 8vo. Romæ, 1756 — : De Solis ac Lunae defectibus Libri V. 4to. Londini, 1760 - : Opera pertinentia ad opticam et astronomiam maxima ex parte nova, & omnia hucusque inedita. | Lat. & Fr.] 5 vols. 4to. Bassani, 1785 Bose (George Mathias): Eclipsin. Terrae MDCCXXXIII. [Inaugural Dissertation.] 4to. Lipsiae, 1733 Bosius (Jo. Andreas): De significatu Cometarum dissertationes et judicia doctorum hominum [Erasti, Dudithii, Squarcialupi, &c.]: collecta, emendata, & Cometomanticæ nostri temporis opposita. Boss (Lewis): --: \*Remarks on the Dudley Observatory Observations of the transit of Mercury, May 6, 1878. 8vo. [1878] - : Report on the declinations of the stars employed in latitude work with the zenith telescope, embracing systematic corrections in declination deduced for various authorities, and a catalogue of five hundred stars for the mean epoch 1875. (Appendix to Report of U.S. Northern Boundary Commis-4to. [1877] sion.) Bossut (Charles): - : Traités de calcul différentiel et de calcul intégral. 2 vols. 8vo. Paris, An VI [1798] - : Nouvelles expériences sur la résistance des Fluides, par

MM. d'Alembert, Condorcet, et Bossut. 8vo. Paris, 1777

Bossut (Jean):

A general history of Mathematics from the earliest times, to the middle of the eighteenth century. Translated from the French. 8vo. London, 1803

Boston, American Academy of Arts and Sciences:

——: Memoirs. Vol. 1-4. 4to. Boston and Cambridge, 1785-1818 New series. Vol. 1-11, Part 1. 4to. Cambridge, 1833-82

-: Proceedings, 1846-73. Vol. 1-8.

8vo. Boston and Cambridge, 1848-73 - : New series, 1873-83. Vol. 1-10 (whole series Vol. 8vo. Boston, 1874-83 9-18).

Boston Public Library:

Index to the Catalogue. 3 vols. 4to. Boston, 1858–66

Boston Scientific Society:

Science Observer, Vol. 1-4. 8vo. Boston, 1877-82

Bothkamp, Sternwarte:

Beobachtungen angestellt auf der Sternwarte des Kammerherrn von Bülow . . . . Herausgegeben von H. C. Vogel (und O. Lohse). Heft 1-3. 4to. Leipzig, 1872-75

Bouché (A.):

---: \*Recherches sur l'attraction moléculaire. 8vo. Paris, 1859 — : Notice sur un nouveau système de tables de logarithmes à cinq décimales. 8vo. Angers, 1859

Bougainville (Louis Antoine de):

Traité du calcul intégral, pour servir de suite à l'analyse des infiniment-petits de M. le Marquis de l'Hôpital. 2 parts, 4to. Paris, 1754-56

Bouguer (Pierre):

— : Essai d'optique, sur la gradation de la lumière.

8vo. Paris, 1729

--- : La figure de la Terre, déterminée par les observations de Messieurs Bouguer & de la Condamine, . . . . envoyés par ordre du Roy au Pérou, pour observer aux environs de l'Equateur. 4to. Paris, 1749

Bourdon (Pierre Marie):

The elements of algebra, translated from the three first chapters of the algebra of M. Bourdon, and designed for the use of students in preparing for the University of London. By 8vo. London, 1828 Augustus de Morgan.

Bourjé (J. P.):

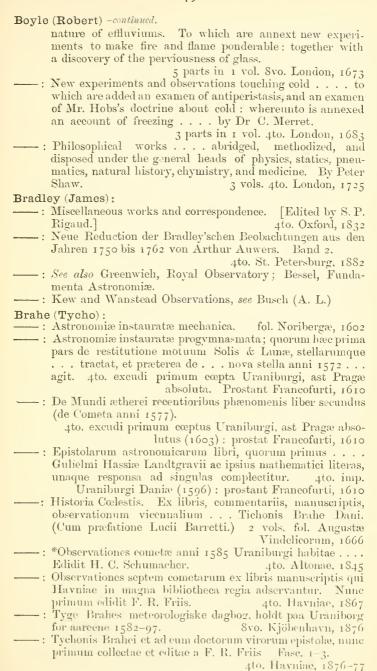
\*Algemeene en bijzondere omstandigheden van de aanmerkelijke zons-verduistering op donderag den vii September 1820. 8vo. Middelburg, 1819

Bouvard (Alexis):

Tables de Jupiter, de Saturne, et d'Uranus, construites d'après la théorie de la mécanique céleste. (Tables astronomiques publiées par le Bureau des Longitudes.) 4to. Paris, 1821

——: Corrections to ditto, see Breen (H.)

Bouvard (Alexis)—continued.
: *Note sur la détermination de la différence des longitudes
entre les méridiens de Paris et de Greenwich.
8vo. Paris, 1822
Bouvard (Alexis) et J. B. Joseph Delambre:
Nouvelles tables de Jupiter et de Saturne, par M.
Bouvard. Nouvelles tables écliptiques des Satellites de
Jupiter par M. Delambre. (Tables astronomiques
publiées par le Bureau des Longitudes.) 4to. Paris, 1808
Bouvard (Eug.):
*De l'influence de la lune sur l'atmosphère terrestre, déter-
minée par les observations météorologiques.
8vo. Bruxelles, 1834
Bouvier (Hannah M.): Familiar astronomy or an introduction to the study of the
heavens to which is added a treatise on the globes,
and a comprehensive astronomical dictionary.
8vo. Philadelphia, 1856
Bowditch (Nathaniel):
— : The improved practical navigator; containing all neces-
sary instruction for determining the latitude by various
methods, and for ascertaining the longitude by lunar obser-
vations in a complete Epitome of Navigation; to
which is added a number of new tables, including those
requisite to be used with the 'Nautical Almanac:' revised
and newly arranged by Thomas Kirby. 8vo. London, 1802
: *Modern Astronomy. 8vo. Boston, 1825
: See also Laplace, Mécanique Céleste.
- : Life. See White (D. A.), Pickering (J.), Young (A.)
Bowman (Frederick H.):
The intermediate text-book of physical science.
8vo. London, 1882
Boyle (Robert):  —: New experiments physico-mechanical, touching the spring
of the air, and its effects, made for the most part in a new
pneumatical engine. 4to. Oxford, 1662
-: A continuation of new experiments physico-mechanical,
touching the spring and weight of the air, and their effects.
Part 1. 4to. Oxford, 1669
- An examen of Mr. T. Hobbes his 'Dialogus Physicus de
naturâ aëris' with an appendix touching Mr. Hobbes's
doctrine of fluidity and firmness. 4to. London, 1662
-: A defence of the doctrine touching the spring and weight
of the air against the objections of Franciscus Linus.
4to. London, 1662
-: Experiments and considerations touching colours.
8vo. London, 1664 ——: Tracts containing new experiments, touching the
relation betwixt flame and air, and about explosions: an
hydrostatical discourse occasion'd by some objections of Dr.
Henry More [&c.] 4 parts in 1 vol. 8vo. London, 1672
Fesays of the strange subtilty, great efficacy, determinate



Brahe (Tycho)—continued.
—: Life, see Brewster (D.)
Brahmegupta and Bháscara:  Algebra, with arithmetic and mensuration, from the Sanscrit  translated by H. T. Colebrooke. 4to. London, 1817
Brandenburg (F. von):  Der Komet ist da! oder unumstösslicher Beweis, dass der Halley'sche Komet zwischen Mond und Erde schwebend schon seit zwei Jahren der Erde sehr nahe, alltäglich sichtbar ist.  8vo. Leipzig, 1835
Brandes (Heinrich Wilhelm):  ——: Die vornehmsten Lehren der Astronomie deutlich dargestellt in Briefen an eine Freundin. 4 vols. 8vo. Leipzig, 1816  Vols. 1 and 2, second edition.  ——: Vorlesungen über die Astronomie, zur Belehrung derjenigen, denen es an mathematischen Vorkenntnissen fehlt.
2 parts in 1 vol. 8vo. Leipzig, 1827  — : De Cometarum Candis disquisitio mathematica. Pars prima. [Inaugural Dissertation.] 4to. Lipsiae, 1830
Bransby (John):  The use of the globes, containing an introduction to Astronomy and Geography. Second edition. 8vo. Ipswich, 1808
Bravais (Auguste):  *Les Étoiles, ou résumé d'astronomie stellaire. 8vo. [Paris], n.d.
Brayley (Edward William):  —: *An account of some of the 'Recent Observations and Researches' of astronomers and physicists on 'the Physical Constitution of the Sun.' 2 pts. 12mo. London, 1863–64  —: *Inferences and suggestions in cosmical and geological philosophy.  8vo. London, 1865  —: *Note on the importance of the spectroscopical examination of the vicinity of the Sun when totally eclipsed.  8vo. London, 1867  —: *The periodical meteors of November. 12mo. London, n.d.
Breaks (Thomas):  The new art of surveying, by the plain table (with tables of logarithms, and of logarithmic sines and tangents).
Bredichin (Th.):  — : *Observations spectroscopiques du Soleil faites pendant l'été de 1872.  Svo. Moscou, 1873  — : *Observations spectroscopiques du Soleil faites pendant l'été (et l'automne) de 1873.  Svo. Moscou, 1874  — : *Observations sur le Jupiter faites en 1874.  Svo. Moscou, 1874
<ul> <li>*Sur la queue de la comète de 1874, c. 4to. Moscou, 1877</li> <li>*Remarques générales sur les comètes. 4to. Moscou, 1879</li> <li>*Recherches sur les queues des comètes. 4to. Moscou, 1880</li> <li>*Sur la comète de 1882, I (Wells) 4to. Moscou [1882]</li> <li>*Recherches sur la comète de 1882, II. 4to. Moscou [1883]</li> </ul>

Bredichin (Th.) -continued.
-: *Histoire de l'hypothèse des ondes cosmiques, composée pour l'explication des formes cométaires. 8vo. Moscou, 1883 -: Supplément. 8vo. Moscou, 1883
Supplément. Svo. Moscou, 1883 : *Sur quelques anomalies apparentes dans la structure des queues cométaires. Svo. Moscou, 1883
: *Sur la grande comète de 1882, II. 8vo. Moscou, 1883
: *Sur les anomalies apparentes dans la structuce de la grande
comète de 1744.  *Quelques remarques concernant mes recherches sur les comètes.  Svo. Moscou, 1884  recherches sur les Svo. Moscou, 1884
: * Sur la queue normale de la comète de 1862, II. 4to Moscou : See also Moscow, Observatoire.
Breen (Hugh):
: *Corrections of Lindenau's elements of the orbit of Venus, deduced from the Greenwich planetury observations from 1750 to 1830.  4to. London, 1849
— : *On the value of the Moon's semidiameter as obtained from occultations observed at Cambridge and Green-
wich. 4to. London, 1866 : *On the corrections of Bouvard's elements of the orbits of
Jupiter and Saturn. 4to. London
Breitschwert (J. L. C. von):  Johann Keppler's Leben und Wirken, nach neuerlich aufgefundenen Manuscripten bearbeitet. Svo. Stuttgart, 1831
Bremiker (Carl):
——: Nautisches Jahrbuch, oder vollständige Ephemeriden und Tafeln für das Jahr 1852. Svo. Berlin, 1850 ——: Logarithmorum vi Decimalium nova tabula Berolinensis
et numerorum vulgarium ab 1 usque ad 100,000 et func- tionum trigonometricarum ad decades minutorum secun-
dorum. 8vo. Berolini, 1852  —: Die Berechnungen des Laufes und der Erscheinungen der
Planeten so wie der Sonnen- und Mondfinsternisse in den Jahren 1858 bis 1868 Ein Anhang zu Bode's Anteitung
zur Kenntniss des gestirnten Himmels. 8vo. Berlin, 1858 : *Bericht über die Beobachtung der Sonnenfinstern'ss am 18. Juli 1860. 8vo. Berlin, 1860
: Logarithmisch-trigonometrische Tafeln mit sechs Decimal- stellen. 8vo. Berlin, 1869
: Studien über höhere Geodäsie. 8vo Berlin, 1869
——: Logarithmisch-trigonometrische Tafeln mit fünf Decimal- stellen. 8vo. Berlin, 1872
— : Tafel vierstelliger Logarithmen. Svo. Berlin, 1874
— : Reduction der Monddistanzen. 8vo
Bremiker (H.):  De temporis e stellarum observationibus definiendi ratione
apud veteres usitatissima. [Inaugural Dissertation.] 4to. Berlin, 1856
E 2

Brentel (Georg): Quadrantis astronomici et geometrici utilitates. Ein Tractat vom astronomischen und geometrischen Quadranten, ausz welchem desz Tags oder desz Nachts durch die Sonn, Mond, und andere Planeten oder Fixsternen mögen gefunden. . . . 4to. Laugingen, 1611 Breslau, Königliche Universitäts-Sternwarte: Mittheilungen . . . . über die bisher gewonnenen Resultate für die geographischen und klimatologischen Ortverhältnisse . . . . herausg. von J. G. Galle. 4to. Breslau, 1879 Breslau, Schlesische Gesellschaft für vaterländische Kul--: \*Auszug aus der Uebersicht der Arbeiten und Veränderungen . . . . im Jahre 1847. 4to. Breslau, 1847 ---: Resultate der . . . im Jahre 1845 ausgeführten meteorologischen Beobachtungen . . . . von Dr. von Boguslawski. 4to, Breslau, 1847 Bretschneider (C. A.): Produktentafel, enthaltend die 2, 3, 4, 5, 6, 7, 8, 9 fachen aller Zahlen von 1 bis 100,000. 4to. Hamburg und Gotha, 1841 Brett (Thomas: A treatise on light, vision & colours, comprising a theory 12mo. Toronto, 1858 on entire new principles. Brewster (David): - : A treatise on new philosophical instruments, for various purposes in the arts and sciences, with experiments on light and colours. 8vo. Edinburgh, 1813 - : The Life of Sir Isaac Newton. 8vo. London, 1831 ---: More worlds than one. The creed of the philosopher and the hope of the Christian. Svo. London, 1854 - : Memoirs of the life, writings, and discoveries of Sir Isaac 2 vols. 8vo. Edinburgh, 1855 Newton. ---: The martyrs of science. Lives of Galileo, Tycho Brahe, 8vo. London, 1874 and Kepler. New Edition. Bridge (B.): - : Six lectures on the elements of plane trigonometry. 8vo. Broxbourn, Herts, 1810 —: Lectures on the elements of algebra. Svo. London, 1810 - : An introduction to the study of the mathematical principles of Natural Philosophy. 2 vols. in 1, 8vo. London, 1813 ---: Lectures on the elements of algebra, designed for the use of the students of the East-India College. Second edition. 8vo. Broxbourn, Herts, 1811

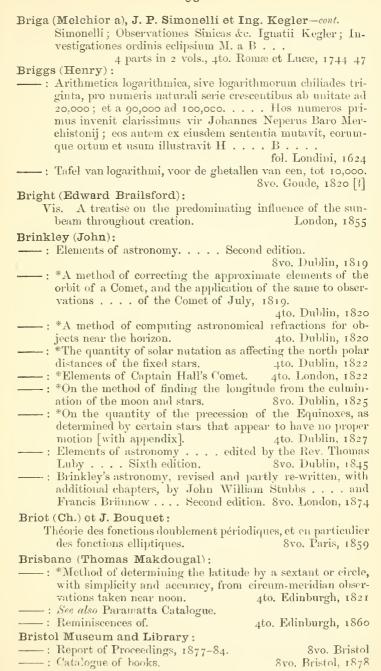
Briga (Melchior a), J. P. Simonelli et Ign. Kegler: Scientia Eclipsium ex imperio et commercio Sinarum illustrata,

Éclaircissements sur la destination de trois zodiaques antiques.

complectens integras constructiones astronomicas J. P.

4to, Paris, 1839

Brière ( - de):



Bristol, Observing Astronomical Society:

#### Report of observations made by the members, 1869-70. 8vo. Bristol, 1871 British Association for the Advancement of Science: -: Lithographed signatures of the Members . . . . who have met at Cambridge, June 1833. 4to. Cambridge, 1833 —: The Catalogue of Stars . . . . containing the mean Right Ascensions and North polar distances of 8,377 fixed stars, reduced to January 1, 1850 . . . . with a preface by the late Francis Baily. 4to. London, 1845 -: A catalogue of those stars in the 'Histoire Céleste Française' of Jérôme Delalande, for which tables of reduction to the epoch 1800 have been published by Prof. Schumacher. Reduced . . . . under the immediate superintendence of Francis Baily. 8vo. London, 1847 — : A catalogue of 9,766 stars in the southern hemisphere for the beginning of the year 1750, from the observations of the Abbé de Lacaille, made at the Cape of Good Hope in the years 1751 and 1752, reduced . . . . under the immediate superintendence of Prof. Henderson, and printed . . . . under the direction of the late Francis Baily; with a preface 8vo. London, 1847 by Sir J. F. W. Herschel. -: Suggestions to astronomers for the observation of the total cclipse of the Sun on July 28, 1851. —: \*Report of the Lunar Committee for mapping the surface of the Moon. By W. R. Birt. 8vo. London [1865, 1866, 1868, 1869] ---: Atlas of charts of meteor tracks . . . . 1845-66. Prepared for the Luminous Meteor Committee . . . . by R. P. Greg and A. S. Herschel. fol. London, 1867 Greg and A. S. Herschel. —: Stars in the constellations of Bode visible in the latitude of Greenwich [for laying down meteor-tracks]. fol. London, n.d. --: \*Report of the Committee for discussing the observations of Lunar objects suspected of change. By W. R. Birt. 8vo. London [1871, 1872] ---: Report of the Committee on mathematical tables. By J. W. L. Glaisher. 8vo. London, 1873 8vo. London, 1835-83 ---: Reports of meetings, 1-52. British Oracle (the), consisting of questions, essays, and dissertations in natural philosophy and the mathematics. Vol. 1. 8vo. London, 1769 Brockmann (F. J.): System der Chronologie; unter besonderer Berücksichtigung der jüdischen, römischen, christlichen und russischen Zeitrechnung, sowie der Osterrechnung. 8vo. Stuttgart, 1883 Brothers (Alfred): ---: \*Catalogue of binary Stars, with introductory remarks. 8vo. Manchester, 1868 8vo. London, 1871 ---: \*Notes on Eclipse photography. Brothers (Richard): The universe as it is: wherein the hypothesis of the earth's

Brothers (Richard)—continued.

motion is refuted, and the true basis of astronomy laid down . . . . [edited by] William Woodley. Svo. London, 1829

Broughton (Charles):

Memoir respecting a new theory of numbers. Part 1.

4to. Edingburgh, 1814

Broughton (William Robert):

A voyage of discovery to the North Pacific Ocean . . . . performed in His Majesty's sloop Providence, and her tender, in the years 1795-98. 4to. London, 1804

#### Broun (John Allan):

- ---: Report . . . . on the completion of the publication . . . . of the observations made in his observatory at Makerstoun. 4to. Edinburgh, 1850
- : Report on the observatories of His Highness the Rajah of Travancore, at Trevandrum, and on the Agustier peak of the western Ghats. 8vo. Trevandrum, 1857
- --: \*On the horizontal force of the earth's magnetism.

4to, Edinburgh, 1861

---: \*The bifilar magnetometer, its errors and corrections.

4to. Edinburgh, 1861

#### Brown (John):

---: The description and use of the trianguler-quadrant.

Svo. London, 1671

- : Horologiographia, or the art of dyalling, being the second book of the use of the trianguler-quadrant.

8vo. London, 1671

#### Brown (Robert), jun.:

- ---: \*On a German astronomico-astrological manuscript, and on the origin of the signs of the Zodiac. 4to, London, 1882
- : Eridanus, river and constellation: a study of the archaic southern asterisms. 4to. London, 1883

#### Browne (Arthur):

A short view of the first principles of the differential calculus. 8vo. Cambridge, 1824

#### Browne (R. G. M.):

Astronomical Geology; a treatise respecting the causes to which the structural and superficial configuration of the earth's crust is attributable. 8vo. London, 1865

#### Browning (John):

- : A plea for reflectors; being a description of the new astronomical telescopes with silvered-glass specula, and instructions for adjusting and using them.

  How to work with the spectroscope.

  8vo. London, 1876
  8vo. London, n.d.

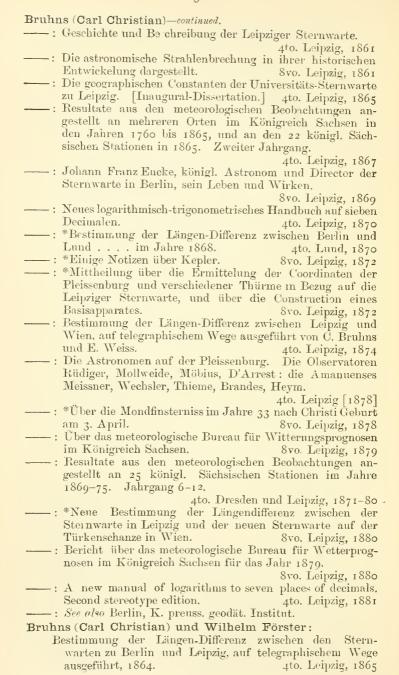
#### Bruce (John):

A memoir of Charles Hutton. 8vo. Newcastle, 1823

### Bruhns (Carl Christian):

---: De planetis minoribus inter Martem et Jovem circa Solem versantibus. Dissertatio astronomica inauguralis.

8vo. Berolini, 1856



#### Brunetto Latini:

Il Trattato della Sfera . . . . con note critiche e sistema di cronologia, tratto dal Tesoro di Brunetto Latini, per cura di B. Sorio. Svo. Milano, 1858

Bruni (Theofilo):
Armonia Astronomica & Geometrica ne' quali
s'insegna la ragione e formatione di tutti gli Horologi.
4to. Venetia, 1622
Brünnow (Franz F. E.):
— : Tafeln der Flora, mit Berücksichtigung der Störungen
durch Juniter and Saturn
durch Jupiter und Saturn. 4to. Berlin, 1855  Tables of Victoria, computed with regard to the perturba-
tions of Juniter and Saturn
tions of Jupiter and Saturn. 4to. New York, 1859
8vo. Ann Arbor, 1858-61
: Lehrbuch der sphärischen Astronomie mit einem
Vorwort von J. F. Encke Zweite Ausgabe.
8vo. Berlin, 1862
-—: Ditto. Vierte Auflage. 8vo. Berlin, 1881 -—: Spherical astronomy Translated by the author
— : Spherical astronomy Translated by the author
from the second German edition. 8vo. London, 1865
: Tables of Iris, computed with regard to the perturbations
of Jupiter, Mars and Saturn, including the perturbations
depending on the square of the mass of Jupiter.
4to. Dublin, 1869
: Traité d'astronomie sphérique et d'astronomie pratique.
Edition française publiée par C. André Astronomie
pratique. 8vo. Paris, 1872
Brussels, Académie Royale des Sciences, des Lettres, et des Beaux-arts de Belgique:
: Nouveaux Mémoires. Tome 9-19. 4to. Bruxelles, 1835-45
: Mémoires. Tome 20-44. 4to. Bruxelles, 1847-82
- : Mémoires couronnés. Tome 9 (suite)-15.
4to. Bruxelles, 1835-41
: Mémoires couronnés et Mémoires des Savants Étrangers.
Tome 16-44. 4to. Bruxelles, 1844-82
Tome 16-44. 4to. Bruxelles, 1844-82
: Mémoires couronnés et Mémoires des Savants Étrangers.
(Collection in 8vo.) Tome 4-6. 8vo. Bruxelles, 1850-55 ——: Mémoires couronnés et autres Mémoires. (Collection in
: Memoires couronnes et autres Memoires. (Collection in
8vo.) Tome 7-35. 8vo. Bruxelles, 1858-83
: Tables des Mémoires des Membres, des Mémoires couronnés
et de ceux des Savants Étrangers, 1816–1857.
12mo Burelles 1878

Ditto, 1858–1878. 12mo. Bruxelles, 1879 —: Bulletins, 1832-56. Tome 1-23. 8vo. Bruxelles, 1832-56

—: 2<sup>me</sup> série, 1857-80. Tome 1-50. 8vo. Bruxelles, 1857-80 --: 3<sup>me</sup> série, 1881-83. Tome 1-5. 8vo. Bruxelles, 1881-83

---: Tables générales et analytiques du recueil des Bulletins, 1re série, 1-23 (1832-56). 8vo. Bruxelles, 1858

---: 2<sup>me</sup> série, 1-20 (1857-66). 8vo. Bruxelles, 1867 21-50 (1867-80). 8vo. Bruxelles, 1883

Brussels, Académie Royale des Sciences, des Lettres, et des Beaux-arts de Belgique—continued.
: Annuaire, 1835-83. 12mo. Bruxelles, 1835-83 : Rapport à Monsieur le Ministre de l'Intérieur, sur les travaux de l'Académie depuis le mois de Juillet 1830. (A. Quetelet.) 4to. Bruxelles [1833]
— : Bibliographie Académique, 1854. 12mo. Brussels, 1855. — : Centième Anniversaire de Fondation (1772–1872). 2 vols. 8vo. Bruxelles, 1872
: Notices Biographiques et Bibliographiques, 1874  12mo. Bruxelles, 1875
— : De l'Astronomie dans l'Académie Royale de Belgique : rapport séculaire (1772–1872), par Ed. Mailly.  8vo. Bruxelles, 1872
— : Catalogue des Livres de la Bibliothèque. 8vo. Bruxelles, 1850 — : Bibliothèque de M. le Baron de Stassart, léguée à l'Académie. 8vo. Bruxelles, 1863
Brussels:
Maritime conference held at Brussels for devising an uniform system of meteorological observations at sea. [English and French.] 4to. Bruxelles, 1853
Brussels, Observatoire Royal:
: Annales. Tomes 1–25. 4to. Bruxelles, 1834–77 Tomes 1–23 publiés par A. Quetelet.
: Annales. Nouvelle série, astronomie. Tome 1. 4to. Bruxelles, 1878
Travaux d'Astronomie contenus dans la première Série des Annales:
Houzeau (J. C.) Uranométrie Générale.
", ", Répertoire des Constantes de l'Astronomie.
: Annales. Nouvelle série, Annales astronomiques. Tomes 2, 3. 4to. Bruxelles, 1879-80: *Résumé des observations météorologiques (et magnétiques)
faites en 1837-45. 4to. Bruxelles, 1838-46 —: Annuaire, 1834-84. Année 1-51. 12mo. Bruxelles
: Almanach Séculaire par A. Quetelet.
12mo. Bruxelles, 1854 ——: Catalogue des livres de la Bibliothèque. 8vo. 1847
: See also Correspondance Mathématique; Liagre (J.); Quetelet (L. A. J.)
Bryson (Robert):
*Description of a new self-registering barometer. 4to. Edinburgh, 1844
Buchan (Alexander):
*Remarks on the climate of Jerusalem. 8vo. Genève, 1872
Buchan (David Stewart, Earl of) and Walter Minto:
An account of the life, writings, and inventions of John Napier of Merchiston. 4to. Perth, 1787
Buchholtz (Fr.):
Neue Theorie der Mechanik des Himmels, und Beweis der
Unhaltbarkeit einer allgemeinen Gravitation. 8vo. Berlin, 1846

59 Buchner (O.) und Gustav Tschermak: \*1. Der Meteorstein von Hungen. 11. Anhang zu der vorstehenden Mittheilung, von G. Tschermak. Svo. Wien, 1877 Buck (John): A new, general and algebraical solution of the higher orders of equations; with solutions of equations to the tenth degree inclusive. 8vo London, 1823 Buda-Pesth, Magyar Tudományos Akadémia: —: Evkönyvei. Kötet 9, 10, 13–16 [imperfect]. 4to. Budapest, 1858-79 — : Mathematikai és Természettudományi Köslemények. Kötet 8vo. Budapest, 1867-81 5, 7-17. — : Értesítő, Új folyam. A mathemat. és természet. osztályok köslönye. Vol. 1. Svo. Pest, 1860 --: Ertesítője. Évfolyam 2-8. 8vo. Pest, 1868-75 --: Név-és Tárgymutató [Index] 1867-74. 8vo. Budapest, 1875 — : Értekezések a Mathematikai Tudományok Köréből. Kötet 1-8. 8vo. Budapest, 1867-81 ---: Természettudományok Köréböl. Kötet 1-11. 8vo. Budapest, 1867-82 ---: Mathematicai Pálvamunkák. Kötet 1. 8vo. Budán, 1844 — : Természettudományi Pályamunkák. Kötet 1−3. 8vo. Budán, 1837-44 ——: Hazai és Külföldi folyóiratok Magyar Tudományos Repertóriuma. II. Osztály, Természet. és mathemat. 8vo. Budapest, 1876 --: Almanach, 1869-72, 1874-78. 8vo. Budapesten Bugge (Thomas): Observationes Astronomicæ annis 1781, 1782 & 1783, institutæ in Observatorio Regio Havniensi et cum tabulis astronomicis comparatæ. 4to. Havniæ, 1784 Buisson (Benjamin): Des forces qui régissent le système solaire. 4to. Nouvelle-Orléans, 1848 Bullet ( — ): Traité du Nivellement, contenant la théorie et la pratique de cet art. 8vo. Paris, 1688

Bulletin Astronomique, publié sous les auspices de l'Observa-Tome 1, Nos. 1-5. toire de Paris par F. Tisserand. 8vo. Paris, 1884

Bulletin des Sciences Mathématiques et Astronomiques: ---: Rédigé par G. Darboux et J. Houel [and others]. Tome 2-11. 8vo. Paris, 1871-76

General index in tome 11.

— : Deuxième Série. Tome 1-8. 8vo. Paris, 1877-84.

Bullialdus [Boulliau] (Ismael):

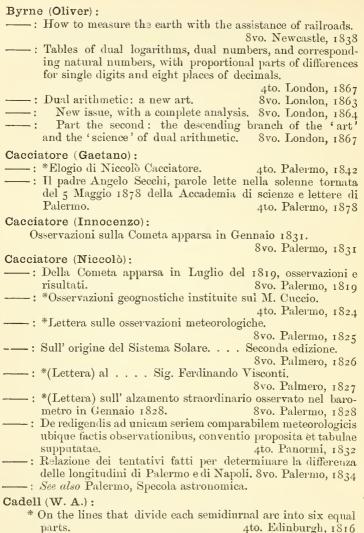
Astronomia philolaica; opvs novvm, in quo motus Planetarum per nouam ac veram Hypothesim demonstrantur ... superque illa hypothesi Tabulæ constructæ ....

Bullialdus [Boulliau] (Ismael)—continued. Addita est nova methodus cvivs ope eclipses solares . . . . expeditissimè computantur. Historia ortvs et progressys astronomiæ. fol. Parisiis, 1645 Bouquoy (Georg von): Prodromus zu einer neuen, verbesserten Darstellungsweise der höhern analytischen Dynamik. 4to. Prag, 1842 Burckhardt (Johann Karl): Tables de la lune. (Tables astronomiques publiées par le Bureau des Longitudes de France.) 4to. Paris, 1812 Burder (William C.): The meteorology of Clifton. 8vo. Bristol, 1863 Burdwood (John): ---: Sun's true bearing or azimuth tables, computed for intervals of four minutes between the parallels of latitude 30° and 60° inclusive . . . Third edition. 8vo. London, 1873 ---: See Davis (J. E.) for continuation for lat. 30° N. to 30° S. Burg (Adam): Ausführliches Lehrbuch der höhern Mathematik, mit besonderer Rücksicht auf die Zwecke des practischen Lebens. 3 vols. 8vo. Wien, 1832-33 Bürg (J. T.): Tables de la lune, see Delambre et Bürg. \*On hypsometrical measurements by means of the barometer and the boiling-point thermometer. Svo. Calcutta, 1859 Burgh (Thomas): ---: A method to determine the areas of right-lined figures universally; very useful for ascertaining the contents of any 4to. Dublin, 1724 ---: Ditto. 4to. Dublin, 1760 Bürja (Abel): Lehrbuch der Astronomie. 5 vols. in 3, 8vo. Berlin, 1794–1806 Burlingtonia: historical notes about Burlington House, Piccadilly, and neighbourhood. 12mo. London, 1878 Burnet (Thomas): ---: The theory of the earth, containing an account of the original of the earth and of all the general changes which it hath already undergone, or is to undergo, till the consummation of all things. The two first books. Third edition. fol. London, 1697 - : See Keill (J.) Burnham (Sherburne Wesley): --: \*Double stars discovered by Mr. Alvan G. Clark. 8vo. New Haven, 1879 - : Report to the Trustees of the 'James Lick Trust' of observations made on Mt. Hamilton with reference to the location of Lick Observatory. 4to. Chicago, 1880

8vo. London, 1881

--: \*Quadruple stars.

Burr (Thomas William):
: A lecture on the history of the law of gravitation.
8vo. London, 1856 : *The precession of the equinoxes and apparatus for its imitation.  8vo. London, 1863 : *Celestial chemistry, and the physical constitution of the
stars and nebulæ.  Svo. London, 1865
Burritt (Elijah H.):  The Geography of the heavens, and class book of astronomy, accompanied by a celestial Atlas Revised and corrected by O. M. Mitchel.  12mo. New York, 1849  Atlas wanting.
Burrow (Reuben):
——: A restitution of the geometrical treatise of Apollonius Pergæus on Inclinations; also the theory of gunnery, or the doctrine of projectiles in a non-resisting medium.  4to. London, 1779
: The Lady's and gentleman's diary, 1776-82.  12mo. London, 1776-82
Burt (T. Seymour):
Miscellaneous papers on scientific subjects. Vol. 3, Parts 1, 2. 12mo. London, 1861-65
Burton (Charles Edward):
: *On a spectroscope of the binocular form for the observa- tion of faint spectra. 8vo. Dublin, 1874
: *Note on the spectrum, polarization, and form of the Zodiacal Light, as observed in the years 1874 and 1875.  8vo. Dublin, 1875
: *On a spectroscope of the binocular form, for the observation of faint spectra.  8vo. Dublin, 1875: *On the aspect of Mars at the oppositions of 1871 and
1873. 4to. Dublin [1877]: *Physical observations of Mars, 1879-80. 4to. Dublin, 1880
Burton (Charles Edward) and Howard Grubb:
*On a new form of ghost micrometer for use with astronomical telescopes. 8vo. Dublin, 1880
Burton (Frances Barbara): Thoughts on physical astronomy, with practical observations
second edition. 8vo. London, 1842
Busch (A. L.):  ——: Reduction of the observations made by Bradley at Kew
and Wansted, to determine the quantities of aberration and nutation.
: Beobachtungen und Wahrnehmungen, welche bei der totalen Sonnenfinsterniss am 28. Juli 1851 gemacht worden sind. 8vo. Königsberg, 1852
— : See also Königsberg, Sternwarte.
Busch (Moritz):  *Ueber die Bemühungen welche zur Erlangung unserer Kenntniss des Fixsternhimmels gemacht worden sind.
8vo. Königsberg, 1847



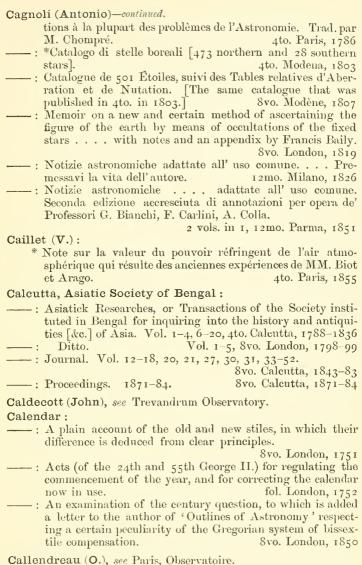
Cadiz: Observaciones Astronomicas hechas en Cadiz, en el Observatorio Real de la Compañia de Cavalleros Guardias Marinas, por . . . . Don Vincente Tofiño de San Miguél . . . . y

por Don Josef Varela. 4to. 1776

Cadiz, see San Fernando.

#### Cagnoli (Antonio):

- : Traité de Trigonométrie rectiligne et sphérique, contenant des méthodes et des formules nouvelles, avec des applica-



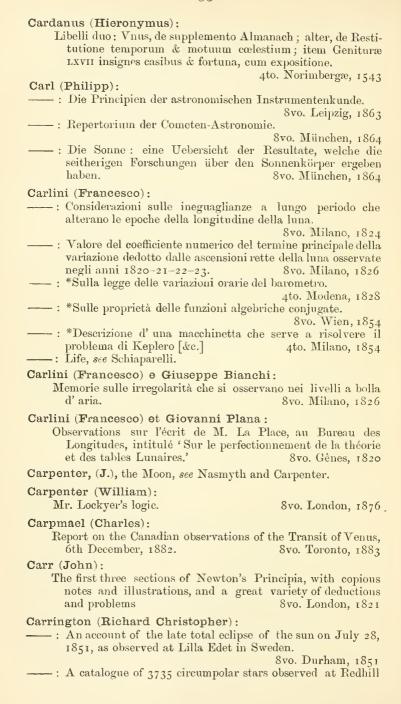
Callet (François):

Tables portatives de logarithmes, contenant les logarithmes des nombres depuis 1 jusqu'à 108,000, [et] les logarithmes des sinus et tangentes, de seconde en seconde pour les cinq premiers degrés, de dix en dix secondes pour tous les degrés du quart de cercle, et suivant la nouvelle division centésimale de dix-millième en dix-millième. 8vo. Paris, 1705

Calver (George):

Hints on silvered-glass reflecting telescopes. Svo. London, 1877
Cambridge, Analytical Society:
Memoirs, 1813. 4to. Cambridge, 1813
Cambridge Observatory:
: Astronomical Observations 1828-65. Vol. 1-21. 4to. Cambridge, 1829-79
Under the superintendence of G. B. Airy, 1828-35.
" J. Challis, 1836–60.
,, J. C. Adams, 1861–65.
: Report of the Observatory Syndicate, 1836-79.
4to. Cambridge, 1836-79  ——: Directorship of, see Carrington (R. C.)  ——: See also Airy (G. B.)
Cambridge, Philosophical Society:
: Transactions. Vol. 1-13. 4to. Cambridge, 1822-83: Proceedings, Part 3-6 and Vol. 3, 4.
8vo. Cambridge, 1866–83
— : Charter and Bye-Laws. 8vo. Cambridge, 1832
Cambridge Problems: being a collection of the printed questions proposed to the candidates for the degree of Bachelor of
Arts from 1801 to 1810. 8vo. Cambridge, 1810
: Ditto. Svo. Cambridge, 1821: Solutions by J. M. F. Wright.
2 vols. 8vo. Cambridge, 1825
-: Mathematical problems and examples, arranged according
to subjects, from the Senate-House examination papers, 1821–1837. 8vo. Cambridge, 1837
Cambridge (Mass.), Astronomical Observatory, see Harvard
College.
Camillus (Joannes):
De ordine ac methodo in scientia servandis liber vnvs, nvnc
primvm in lvcem editvs. 4to. Venetiis, 1561 Campagna (Giuseppe):
In morte di Giuseppe Piazzi. 8vo. Napoli, 1826
Campbell (Duncan):
Time's Telescope, universal and perpetual, fitted for all countries and capacities; containing perpetual tables, fitted to
the old and new stile 8vo. London, 1734
Canadian Journal of Science, Literature, and History.
Vol. 12-15. 8vo. Toronto, 1868-76
[Continued as] Proceedings of the Canadian Institute. Vol. 1, 2.
8vo. Toronto, 1883-84
Cape of Good Hope, see Herschel (J. W. F.); Lacaille (N. L. de). Arc of Meridian, see Maclear (T.)
Cape of Good Hope, Magnetical and Meteorological Observatory:
Observations printed under the superintend-

Cape of Good Hope, Magnetical and Meteorological Observatory-continued. ence of Lieutenant-Colonel Edward Sabine, 1841-46. With abstracts of the observations from 1841 to 1850 inclusive. 2 vols. 4to. London, 1851 Cape of Good Hope, Meteorological Committee: Instructions for making and registering meteorological observations at various stations in Southern Africa. 8vo. Cape Town Cape of Good Hope, Royal Observatory: — : Astronomical Observations made . . . . in the year 1834, under the direction of Thomas Maclear. Vol. 1. 4to. Cape Town, 1840 ---: Results of Astronomical Observations made . . . . in the years 1856-60, and 1871-76. Svo. Cape Town, 1871-79. 1856-60 under the superintendence of Sir T. Maclear. 1871-76 under the direction of E. J. Stone. ---: Zenith distances observed with the Mural Circle, and calculation of geocentric south polar distances, 1836-37. —: The Cape Catalogue of 1159 stars, deduced from observations . . . . 1856 to 1861, reduced to the epoch 1860, under the superintendence of E. J. Stone. Svo. Cape Town, 1873 —: The Cape Catalogue of Stars, deduced from observations made . . . . 1834 to 1840, and reduced to the epoch 1840, under the superintendence of E. J. Stone. 8vo. Cape Town, 1878 ---: Catalogue of 12,441 stars, for the epoch 1880, from observations made . . . . during the years 1871 to 1879 [under the superintendence of ] E. J. Stone. 4to. London, 1881 --: Declinations of stars, see Henderson (T.) —: Refraction Tables, see Bessel (F. W.) — : Observations of Halley's Comet, &c., see Maclear (T.) Cape Town, South African Philosophical Society: Transactions, 1877-81. Vol. 1, 2. 8vo. Cape Town and Cambridge, 1878-82 Capra (Balthasar): Usus et fabrica Circini cuiusdam proportionis, per quem omnia ferè tum Euclidis, tum mathematicorum omnium problemata facili negotio resolvuntur. 4to. Bononiæ, 1655 Capron (J. Rand): ---: Photographed spectra. One hundred and thirty-six photographs of metallic, gaseous, and other spectra, printed by the permanent autotype process. Svo. London, 1877 - : Auroræ: their characters and spectra. 4to. London, 1870 - : \*A plea for the rainband. Svo. London, 1882 —: \*The auroral beam of November 17, 1882. 8vo. London, 1883 — : Meteorological observations made at Guildown, Guildford, 1883. Svo.



Carrington (Richard Christopher)—continued.
in the years 1854, 1855, and 1856, and reduced to mean positions for 1855.0. fol. London, 1857
-: Circumpolar charts, for 1855 o [10 maps]. fol: Information and suggestions addressed to persons who may be able to place themselves within the shadow of the total eclipse of the Sun, on September 7, 1858 [with appendix,
giving a translation of M. Kutczycki's account of the eclipse of 1850].  8vo. London, 1858
: Copies of three letters addressed to the Vice-Chancellor of the University of Cambridge respecting the future directorship of the Observatory. fol. Cambridge, 1861
: Observations of the spots on the Sun from November 9, 1853, to March 24, 1861, made at Redhill.
: On the financial state and progress of the Royal Astronomical Society.  4to. London, 1863 8vo London, 1863
- : Appeal on the accounts at the Special General Meeting [of the Royal Astronomical Society], 1866.  Svo. London, 1866
: Report on the present state of the astronomical instruments at the Observatory of Durham, 1851. 8vo. London, [1874]: Revenue account versus Cash account [Royal Astronomical
Society]. 8vo. London, 1875 : An example of applying Professor Challis's method of ob-
taining the errors of position of the polar axis of an equatorial.
Carruthers (G. T.):
- : An attempt to prove Newton's law of attraction for a resisting medium. Svo. Roorkee [1881] - : The inverse distances of the planets. Svo. Roorkee [1881] - : A theory concerning Sun spots. Svo. Roorkee [1881]
Cassani (Joseph):
Tratado de la naturaleza, origen, y causas de los Cometas. Con la historia de todos los que se tiene noticia haverse visto, y de los efectos, que se les han atribuido, donde se manifiesta quam sin fundamento se dice que son infaustos.  8vo. Madrid [1737]
Cassini (Jacques):
<ul> <li>Divers ouvrages d'astronomie.</li> <li>Eléments d'astronomie.</li> <li>Tables astronomiques du Soleil, de la Lune, des planètes, des étoiles fixes, et des satellites de Jupiter et de Saturne.</li> <li>2 vols. 4to. Paris, 1740</li> </ul>
Cassini (Jean Dominique), [jun.]:
: Extrait des observations astronomiques et physiques faites, par ordre de Sa Majesté, à l'Observatoire Royal, en l'année 1785-91. 4to. Paris, 1786-91
— : Exposé des opérations faites en France en 1787 pour la jonc- tion des Observatoires de Paris et de Greenwich, par MM. Cassini, Méchain et Le Gendre. Description et usage

Cassini (Jean Dominique), [jun.]—continued.

d'un nouvel instrument, propre à donner la mesure des angles à la précision d'une seconde. 4to. Paris [1791]

Cassini de Thury (César François):

La méridienne de l'Observatoire Royal de Paris, vérifiée dans toute l'étendue du Royaume par de nouvelles observations; ... avec des observations d'histoire naturelle faites dans les provinces traversées par la méridienne, par Le Monnier. 4to. Paris, 1744

Cassino (Samuel E.):

The International Scientist's Directory.

8vo. Boston, U.S., 1883

Cassola (Gaspare Luigi):

Dell' Astronomia libri Sei [an astronomical poem].

8vo. Milano, 1774

Castelli, Benedetto:

Risposta alle opposizioni del S. Lodovico delle Colombe e del S. Vincenzio di Grazia, contro al trattato del Sig. Galileo Galilei, delle cose che stanno sù l'acqua, ò che in quella si muovono. 4to. Firenze, 1615

Attributed to Galileo.

Caswell (Alexis):

----: \*Meteorological Observations made at Providence, R.I.

1831-60. 4to. Washington, 1860

----: \*Lectures on Astronomy. 8vo. [Washington]

Cataldi (Pietro Antonio):

Prima (seconda, terza e quarta) parte della pratica aritmetica.

4 parts fol. Bologna, 1602-17, 1616

Cattan (Christopher):

The Geomancie of Maister Christopher Cattan . . . . whereunto is annexed the wheele of Pythagoras. Translated out of the French.

4to. London, 1591

Catureglio, Ephemerides, see Bologna.

Cavalieri (Cavalerius), Bonaventura:

Geometria indivisibilibus continuorum noua quadam ratione promota. 4to. Bononie, 1653

Cavendish (Henry):

\*On the civil year of the Hindoos and its divisions, with an account of three Hindoo almanacs. 4to. London, [1792]

Cayley (Arthur):

—: An elementary treatise on elliptic functions.

8vo. Cambridge, 1876

---: \*On Hansen's lunar theory. 8vo. London, 1857

Cellérier (Gustave):

\*Réfraction cométaire. 4to. Genève, 1883

Celoria (Giovanni):

— : La luna; monografia fisica. 8vo. Milano, 1872

—: Le Comete. 8vo. Milano, 1873

---: \*Sopra alcuni Eclissi di Sole antichi, e su quello di Agatocle in particolare. 4to. Roma, 1880

Celoria (Giovanni) - continued.
-: *Sull' Eclissi Solare totale del 3 Giugno, 1239. 4to. Milano : *Sopra una deviazione sensibile del filo a piombo esistente fra Milano e Genova. Svo. Milano, 1884
Chaeornac (Jean):
: *Note sur les températures des sources jaillissant en talus escarpés dans le Jura. 8vo. Lyon, 1864
: Note sur les apparences de la surface lunaire.  8vo. Lyon, 1864
— : Notice sur la constitution physique du Soleil. 8vo. Lyon — : Ecliptic Charts, see Paris, Observatoire, Atlas Écliptique.
Challis (James):
: *On the extension of Bode's empirical law of the distances of the planets from the Sun, to the distances of the Satellites from their respective primaries. 4to. Cambridge, 1829 : *On the determination of the longitude of the Observatory of Cambridge by galvanic signals. 4to. Cambridge, 1854
of Cambridge by galvanic signals. 4to. Cambridge, 1854—: Lectures on practical astronomy and astronomical instru-
ments. 8vo. Cambridge, 1879  : Observations, see Cambridge Observatory.
Chalmers (Thomas):
: A series of Discourses on the Christian revelation, viewed in connection with the modern astronomy fifth edition. 8vo. Glasgow, 1817
— : Ditto. Tenth edition. Svo. Glasgow, 1822
Chambers's Educational Course:  Mathematical tables, consisting of logarithmic, nautical, and other tables. New edition.  8vo. Edinburgh, 1870
Chambers (Charles):
The meteorology of the Bombay Presidency. 4to. [with vol. of maps, &c. fol.] London, 1878
Chambers (F.): : Abnormal variations of barometric pressure in the tropics,
and their relation to Sun-spots, rainfall and famines.  fol. Bombay [1880]
: Report on the administration of the meteorological department of Western India for the years 1878-79, 1880-81.
fol. Bombay Chambers (George Frederick):
— : A handbook of descriptive and practical Astronomy.
8vo. London, 1861
: Descriptive Astronomy.  : *Weather facts and predictions.  8vo. Oxford, 1867  8vo. 1868
— : A handbook of descriptive astronomy. Third edition.
8vo. Oxford, 1877  ——: Cycle of celestial objects, see Smyth (W. H.).
[Chambers, Robert]:
Vestiges of the natural history of creation. 8vo. London

Chapultepec, Observatorio Astronómico:
Anuario, 1882–83. 12mo. México, 1881–82
Charlton (Jasper):
The Ladies' Astronomy and Chronology (explained and demonstrated by means of a machine called the <i>Assimilo</i> ).
8vo. London, 1735
Charpentier (F. E. A.):
De la pesanteur terrestre. 8vo. Paris, 1859
Chartres:
Catalogue des manuscrits de la bibliothèque de la ville.
Chase (Pliny Earle):
-: *Velocity of primitive undulation. 8vo. New Haven, 1874 -: *Origin of attractive force. 8vo. Philadelphia, 1874 -: *Astronomical approximations, 1-6. 8vo. Philadelphia, 1880
Chasles (Michel):
: Traité de géométrie supérieure. 8vo. Paris, 1852: *Lettre à M. L. Am. Sédillot, sur la Question de la Variation lunaire découverte par Aboul-Wéfa. 4to. [Paris]: Catalogue de la Bibliothèque Scientifique de M. C.
Chasles (Philarète):
— : Galileo Galilei : sa vie, son procès, et ses contemporains. 8vo. Paris, 1862
Chastellet (Marquise du), see Du Chastellet.
Chaufa Mongkut (T. Y.):
Supplement to the Bangkok Calendar.
Svo. Bangkok (Siam), 1850 Chaulnes (le Duc de):
Nouvelle méthode pour diviser les instruments de mathématique et d'astronomie. fol. Paris, 1768
Chauvenet (William):  A manual of spherical and practical astronomy: embracing the general problems of spherical astronomy, the special applications to nautical astronomy, and the theory and use of fixed and portable astronomical instruments; second edition.  2 vols. 8vo. Philadelphia, 1864
Chazallon (A. M. R.):  Mémoire sur les divers moyens de se procurer une base, par la mesure directe, par la vitesse du son, par des observations astronomiques.  8vo. Paris, 1837
Cherbourg, Société des Sciences Naturelles (et Mathématiques):
— : Mémoires. Vols. 2-23. 8vo. Cherbourg, 1854-8o — : Compte-rendu de la Séance extraordinaire le 30 Déc.
: Catalogue de la Bibliothèque. 2 parts.
8vo. Cherbourg, 1870–78  8vo. Cherbourg, 1881

Cheseaux (Jean Philippe Loys de):

——: Traité de la Comète qui a paru en Décembre 1743, et en Janvier, Février & Mars, 1744. Contenant outre les observations de l'auteur celles qui ont été faites à Paris par Mr. Cassini, et à Genève par M. Calandrini.

8vo. Lausanne et Genève, 1744

— : Mémoires posthumes . . . . sur divers sujets d'astronomie et de mathématiques, avec des nouvelles tables très exactes des moyens mouvemens du soleil & de la lune. (Remarques historiques et chronologiques sur Daniel.)

4to. Lausanne, 1754

Cheyne (C. Hartwell Horne):

: The earth's motion of rotation, including the theory of precession and nutation.

8vo. Cambridge, 1867

: An elementary treatise on the planetary theory, with a collection of problems.

8vo. Cambridge, 1862

— : Ditto. Second edition. Svo. Cambridge, 1870

— : Ditto. Third edition, edited by the Rev. A. Freeman. 8vo. Cambridge, 1883

#### Chiarini (C.):

Fragment d'Astronomie Chaldéenne, découvert dans le prophète Ezéchiel. 8vo. Leipzig, 1831

Chicago Astronomical Society:

The Solar Eclipse of July 29, 1878 [Reports by various observers]. 8vo. Chicago, 1878

Chicago, Dearborn Observatory:

Annual Report of the Board of Directors . . . together with the Report of the Director of the Dearborn Observatory, 1880-83.

8vo. Chicago, 1880-83

### Chicago Public Library:

Annual Report, 1880-82.

8vo. Chicago

Childe (G. F.):

Singular properties of the ellipsoid, and associated surfaces of the nth degree. 4to. Cape Town, 1861

Childe (L.):

A short compendium of the new and much enlarged sea-book or Pilot's sea mirror. 2 parts. 4to. London, 1669

#### China:

Documents relating to the establishment of meteorological stations in China . . . and exchange of weather news by telegraph along the Pacific Coast of Asia.

#### Chladni (Ernst Florens Friedrich):

Die Akustic.

4to. Leipzie, 1802

Choumara (P. M. Théodore):

Véritable cause physique de la pesanteur des corps terrestres, et de la gravitation universelle des corps célestes.

8vo. Paris, 1855-56

Christiania, K. Norske Frederiks Universitet:

— : Meteorologiske lagttagelser i det Sydlige Norge, 1863–66. Oblong 4to. Christiania, 1867 Christiania, K. Norske Frederiks Universitet-continued. ----: Meteorologiske Iagttagelser paa fem Telegrafstationer ved Norges Kyst. Reducerede og sammenstillede af J. J. Astrand. Aargang, 1-2. Oblong 4to. Christiania, 1866 Christiania, Norske Meteorologiske Institut: ---: Förste Beretning . . . . af H. Mohn. 8vo. Christiania, 1867 ---: Norsk Meteorologisk Aarbog, 1867-73. Aargang 1-7. 4to. Christiania, 1868-74 ---: Storm-Atlas . . . af H. Mohn. fol. Christiania, 1870 ---: Jahrbuch, 1874-81. Herausgegeben von H. Mohn. 4to. Christiania, 1877-82 Christiania, Observatorium: — : Meteorologische Beobachtungen, 1837-63. 4to, Christiania, 1860-65 - : Meteorologiske Iagttagelser, 1864-67. Oblong 4to. Christiania, 1865-68 -: See also Hansteen und Fearnley; Mohn (H.) Christie (James R.): An introduction to the elements of practical astronomy. 8vo. London, 1853 Christie (S. Hunter): ----: \*Discussion of the magnetical observations made by Captain Back during his late Arctic expedition. 4to. London, 1836 --: An elementary course of mathematics for the use of the Royal Military Academy, and for students in general. Vol. 1, Arithmetic and Algebra. 8vo. London, 1845 Christie (W. H. Mahony): Astronomy. 8vo. London, 1875 Chrysologue de Gy [André (Noel)]: Abrégé d'Astronomie pour l'usage des planisphères. 8vo. Paris, 1778 Chumacero (J. M.): The elements of the principal sciences, viz. metaphysics, logic, and universal mathematics, by way of question and answer. 8vo. London, 1770 Ciccolini (Lodovico): Formole analitiche pel calcolo della pasqua, e correzione di quelle di Gauss, con critiche osservazioni su quanto ha scritto del calendario il Delambre. 8vo. Roma, 1817 Cimento (Accademia del), see Florence, Cincinnati Observatory: ---: An oration delivered . . . . on the occasion of laying the corner stone of an Astronomical Observatory. By John Quincy Adams. 8vo. Cincinnati, 1843 ---: The Annual Address . . . . by E. D. Mansfield . . . . Together with the reports of the Board of Control, and of the Director of the Observatory. 8vo. Cincinnati, 1845 --: Inaugural Report of the Director . . . . 1868. Annual Report, 1869-70. 8vo. Cincinnati, 1869-70

/3
Cincinnati Observatory—continued.  —: Publications, Nos. 1-7.  Svo. Cincinnati, 1876-83
1. Catalogue of 50 double stars. Howe. 2. Measurements of 176 double stars. Mitchel.
3. , 166 , Stone.
4. ,, 517 ,, ,, 5. ,, 1054 ,, ,,
6. ,, 455 ,, ,, 7. Observations of comets. Stone and Wilson.
Circle (the) and the square in composition, or the quadrature of the circle. By the author of 'Homographia,' &c.
8vo. London, n.d. Ciscar (Gabriel):
<ul> <li>Explicación de varios métodos gráficos, para corregir las distancias lunares con la aproximación necesaria para determinar las longitudes en la mar.</li> <li>See also Juan (Jorge).</li> </ul>
Clairaut (Alexis Claude):
: Théorie de la figure de la Terre, tirée des principes de l'hydrostatique.
<ul> <li>: Théorie du mouvement des Comètes, dans laquelle on a égard aux altérations que leurs orbites éprouvent par l'action des planètes. Avec l'application de cette théorie à la Comète qui a été observée dans les années 1531, 1607, 1682 &amp; 1759.</li> <li>: Théorie de la lune, déduite du seul principe de l'attraction réciproquement proportionnelle aux quarrés des distances seconde édition.</li> </ul>
Clare (Martin): The motion of Fluids, natural and artificial; in particular that
of the Air and Water. Second edition. 8vo. London, 1737
Clare (Peter):  *An account of some thunder-storms and extraordinary electrical phenomena that occurred in the neighbourhood of Manchester, July 16, 1850.  8vo. London, 1850
Clark (Alvan G.), double stars, see Burnham.
Clark (Latimer):  — : A treatise on the use of the transit instrument, as applied to the determination of time, for the use of country gentlemen.  8vo. London, 1882
: Transit tables for 1883-84, giving the Greenwich mean time of the transit of the Sun, and of certain stars, for every day in the year, with an ephemeris of the Sun, Moon, and

Clark (Samuel):

correct time.

An easy introduction to the theory and practice of mechanics; containing a variety of curious and important problems.

-: Manual of the transit instrument as used for obtaining

4to. London, 1764

8vo. London, 1884

8vo. London, 1883-84

Clarke (Alex. Ross): : *On the determination of the direction of the meridian with
a Russian diagonal transit instrument. 4to. London 1870 ——: See also United Kingdom, Ordnance Survey.
Clarke (Colin C.):
: The Universe. 8vo. Melbourne, n.d. 8vo. Melbourne, 1879
Clavijo (Salvador):  Reflexiones sobre el sistema planetario.  8vo. Santa Cruz de Teneriffe, 1870
Clavius (Christophorus):
<ul> <li>In Sphæram Ioannis de Sacro Bosco commentarivs, nunc iterum ab ipso auctore recognitus, &amp; multis ac varijs locis locupletatus.</li> <li>In Sphæram Ioannis de Sacro Bosco commentarivs, nunc tertio ab ipso auctore recognitus, &amp; plerisque in locis locu-</li> </ul>
pletatus. 4to. Rome, 1585  — : In Spheram Ioannis de Sacro Bosco commentarius, nunc quartò ab ipso auctore recognitus, & plerísque in locis locupletatus. 4to. S. Gervasii [Genevæ], 1602
: Fabrica et vsvs Instrumenti ad horologiorum descriptionem peropportuni: accessit ratio describendarum horarum a meridie & media nocte exquisitissima, & nunquam ante hac in lucem edita.  4to. Romæ, 1586
: Astrolabivm. 4to. Rome, 1593: Opera Mathematica. 5 vols. fol. Moguntiæ, 1611–12
Cleomedes:
Meteora, Grace et Latine. A Roberto Balforeo multis mendis repurgata, Latinè versa, & perpetuo commentario illustrata. 4to. Burdigalæ, 1605
Clifford (William Kingdon):
Mathematical fragments, being facsimiles of his unfinished papers relating to the theory of Graphs. fol. London, 1881
Clock (Great) for the New Palace at Westminster:  ——: Copies of three letters addressed by Mr. Dent to the Commissioners of Her Majesty's Woods and Forests.
fol. London, 1847
Cocker (Edward):
: Decimal Arithmetick Perused, corrected, and published
by John Hawkins. 8vo. London, 1695 ——: Cocker's Arithmetick; being a plain and familiar method,
suitable to the meanest capacity for the full understanding of that incomparable art; perused and published by John Hawkins 56th edition, by G. Fisher.
12mo. London, 1767
: ditto, 51st edition, by I. Jackson. 12mo. Dublin, 1769

Coddington (Henry):

A treatise on the reflexion and refraction of light; (a treatise on the eye and on optical instruments;) being part 1 (and 2) of a system of optics.

8vo. Cambridge, 1829-30

Coglievina (Domenico):

Centigrad-Photometer. Neues optisches Instrument zur directen Bestimmung der Intensität jeder beliebigen Lichtquelle. 8vo. Braunschweig, 1880

## Coimbra (Observatorio Real da Universidade):

- : Ephemerides astronomicas calculadas para o meridiano do Observatorio da Universidade . . . . para o uso do mesmo observatorio, e para o da navegação Portugueza. 1804-24, 1844-6, 1853, 1865-71, 1874-77, 1879-85.

  4to. Coimbra, 1803-83
- : Taboadas astronomicas ordenadas a facilitar o calculo das Ephemerides. 4to. Coimbra, 1813
- : Methodo facil para calcular as ascensões rectas e declinações dos astros, pelo Jacome Luiz Sarmento. 4to. Coimbra, 1868
- : Observações feitas no primeiro vertical . . . . com o instrumento de passagem transportavel de Repsold.

4to. Coimbra, 1882

### Colába, see Bombay.

## Colden (Cadwallader):

An explication of the first causes of action in matter, and of the cause of gravitation. Svo. London, 1746

#### Cole (James E.):

The Earth's orbit and distance from the Sun; reason vs. imagination. 16mo. New York, 1882

## Cole (William):

Philosophical remarks on the theory of Comets; to which is subjoined, a Dissertation on the nature and properties of Light. 8vo. London, 1823

# Colebrooke (Henry Thomas): see Brahmegupta.

## Coleman (George):

Lunar and nautical tables, arranged and adapted for determining (by various methods) the latitude at sea, [&c.]

8vo. London, 1846

# Coley (Henry):

The marrow of astrology; in two books.

2 parts in 1 vol. 4to. 1688

#### Colla (Antonio):

- ---: \*Sulla temperatura atmosferica notata a Parma nei mesi di Giugno e Luglio 1846. 8vo. Roma, 1846
- --: \*Fortissime perturbazioni magnetiche ed Aurore Boreali osservate a Parma . . . . Ottobre 1847. Svo. Roma, 1847
- ---: \*Sulle due comete di D'Arrest e di Brorsen.

8vo. Roma, 1851

•
Colla (Antonio)—continued.  —: *Sulle due Comete scoperte nell' anno 1850 da Petersen e da Bond, e sul ritorno della Cometa periodica di Faye.
*Sulla Cometa di Westphal e sui due nuovi Asteroidi  Fortuna e Massilia. 8vo. Parma, 1852  : *Sulla Cometa di Westphal e sui quattro nuovi Asteroidi
8vo. Parma, 1852 : *Sulla nuova cometa, e sulla nuova Nebulosa a doppio nucleo scoperte all' Osservatorio dell Collegio Romano.  8vo. Parma, 1853
: *Sopra la III e IV Cometa del 1854 e sul pianeta Urania.
8vo. Fano, 1855 : *Intorno alla III Cometa del 1855 scoperta dall' astronomo Carlo Bruhns. 8vo. Fano, 1855 : *Fenomeni celesti nel Novembre 1856 8vo. Parma, 1856 : *Ulteriori notizie intorno ai pianeti Circe, Leucotea, Atalanta, e Fides; e sulla III Cometa del 1855, [&c.] 8vo. Parma, 1856
: Necrologia di A. Colla. 8vo. Parma, 1857
Collins (John), see Commercium Epistolicum.
Colnett (James):  A voyage to the South Atlantic and round Cape Horn into the Pacific Ocean.  4to. London, 1798
Colombe (Lodov. delle):  ——: Discorso apologetico d' intorno al discorso del S.  Galileo Galilei circa le cose che stanno sù l'acqua ò che in quella si muouono.  4to. Bologna, 1655  ——: See Castelli (B.)
Colonial Magnetic Observatories:  ——: Observations on days of unusual magnetic disturbances printed under the superintendence of LieutCol. Edward Sabine, 1840-44. Vol. 1, Parts 1, 2, 4to. London, 1843-51  ——: See Cape of Good Hope, Hobarton, St. Helena, Toronto.
Comet, 1664-65:  ——: Il teloscopio d' Urania. Discorso astronomico preventivo del sofistico indovino sopra della Cometa apparsa del mese di Decembre 1664.  ——: Politisches Sendschreiben eines Teutschen Patrioten über die vilfältigen und ungleichen Schrifften und Tractaten welche wegen dess unlängst im 1664 und 1665  erschienenen Cometen aussgangen und in offentlichen Truck gegeben worden.  4to. 1665
Compt [Hallowin]

Comet [Halley's]:

Der Komet von 1759 wiederkehrend im Jahre 1835, wahr-

Comet [Halley's]—continued.

scheinlich das von den Heiligen drei Königen beobachtete Gestirn. Mit angehängter Uebersicht des Wissenswürdigsten über den Lauf und die Natur der Kometen.

Svo. Zeitz, 1819

Cometomantia. A discourse of Comets: showing their original, substance, place, time, magnitude, motion, number, colour, figure, kinds, names, and, more especially, their prognostics, significations and presages.

8vo. London, 1684

Comets. Observations on the origin and nature of Comets, their influence and use, and on the variations of the magnetic needle [by H. S.]

8vo. London, 1832

Comets (A dissertation on), proving that the vulgar and longreceived notion, that they either cause or foreshew public calamities, is unphilosophical, absurd, and irreligious. Being the substance of the celebrated Mr. Bayle's Reflections on that subject.

4to. London, n.d.

## Commandinus (Federicus):

In planisphærium Ptolemæi Commentarius.

4to. Venetiis, 1558

Commercium Epistolicum:

D. Johannis Collins, et aliorum, de Analysi promota. Jussu Societatis Regiæ in lucem editum. [Second edition.]

8vo. Londini, 1722

Commercium Epistolicum de Varia Re Mathematica, inter Celeberrimos præsentis seculi Mathematicos, viz. Isaacum Newtonum [&c.] . . . et alios. Jussu Societatis Regiæ in lucem editum. 8vo. Londini, 1725

Commercium Epistolicum:

J. Collins et aliorum de analysi promota, etc., ou correspondance de J. Collins et d'autres savants célèbres du xvii° siècle, relative à l'analyse supérieure . . . publiée par J. B. Biot et F. Lefort. 4to. Paris, 1856

## Comparetti (Andreas):

Observationes optica de luce inflexa et coloribus.

4to. Patavii, 1787

Comte (Auguste):

Traité philosophique d'Astronomie populaire, ou exposition systématique de toutes les notions de philosophie astronomique, soit scientifiques, soit logiques, qui doivent devenir universellement familières.

8vo. Paris, 1844

#### Conder (Francis Roubiliac):

The geognostic pendulum, or an enquiry into the theory of the pendulum experiment.

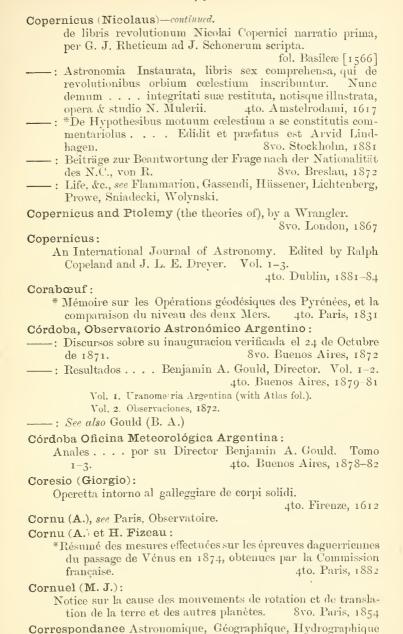
8vo. London, 1851

### Condillac (E. Bonnot de):

La langue des calculs; ouvrage posthume et élémentaire, imprimé sur les manuscrits autographes de l'auteur, dans lequel des observations . . . . démontrent les vices des langues vulgaires.

12mo. Paris, au VI. (1798)

Contarenus (Gaspar): (De Elementis eorumque mixtionibus libri quinque). 12mo.
Conversations-Lexikon):
Allgemeine deutsche Encyklopädie für die gebildeten Stände Siebente Originalauflage. 12 vols. 8vo. Leipzig, 1830
Conynenburg (Lucas):  Dissertatio astronomico-physica de Cometis. [Inaugural dissertation.]  4to. Trajecti ad Rhenum, 1728
Cook (James), Captain:
: See also Wales (W.)
Cooper (Edward J.):  —: Cometic orbits; with copious notes and addenda.  8vo. Dublin, 1852  —: Observations of Donati's Comet, 1858, made at Markree
Observatory, Ireland. 4to. Dublin  ——: See also Markree Observatory.
Copeland (R.), see Göttingen, K. Sternwarte.
Copenhagen, Kongelige Danske Videnskabernes Selskab:  —: Oversigt over det K. Danske Videnskabernes Selskabs Forhandlinger og dets Medlemmers Arbejder, 1842-83.  Svo. Kjöbenhavn, 1843-83  —: Skrifter, femte Række: Naturvidenskabelig og mathematisk Afdeling. Bind 1-12. 4to. Kjöbenhavn, 1849-80  —: Sjette Række: Naturvidenskabelig og mathematisk Afdeling. Bind 1-2. 4to. Kjöbenhavn, 1881-83
Copenhagen, Observatorium:
— : Observationes Astronomicæ annis 1781, 1782, & 1783, institutæ in Observatorio Regio Havniensi, et cum tabulis astronomicis comparatæ, auctore Thoma Bugge.
4to. Havniæ, 1784 : Siderum Nebulosorum observationes Havnienses institutæ  1861-67; auctore H. L. D'Arrest.  4to. Havniæ, 1867
: See also Arrest (H. L. d'); Schumacher (H. C.)
Copenhagen, Universitet:  Festskrifter, udgivne af det mathematisk-naturvidenskabelige Fakultet i anledning af Universitetets Firehundredaarsfest, Juni 1879.
Copernicus (Nicolaus):
——: De Revolutionibus orbium cœlestium libri vi.  fol. Norimbergæ, apud J. Petreium, 1543  ——: De revolutionibus orbium cœlestium libri vi Item.
. Do lovolutions of bland codestium fibri vi Item.



---: See Monatliche Correspondenz.

et Statistique du Baron de Zach. Vol. 1-14.

8vo. Gênes, 1818-26

Correspondance Mathématique et Physique, publiée par A Quetelet. Tome 3-6. 8vo. Bruxelles, 1827-30 —: de l'Observatoire de Bruxelles, publiée par A. Quetelet
Tome 7, 8.  Svo. Bruxelles, 1832-33 : publiée par A. Quetelet. Tome 9-11 (1-3 de la troisième
série). 8vo. Bruxelles, 1837–30
Correspondence of scientific men of the seventeenth century including letters of Barrow, Flamsteed, Wallis, and Newton printed from the originals in the collection of the Earl of Macclesfield. [Edited by S. P. Rigaud.]
2 vols. 8vo. Oxford, 1841
: Revue Encyclopédique hebdomadaire des progrès des
Sciences. Tome 5-25. 8vo. Paris, 1854-64
: Série II. 6 vols. 8vo. Paris, 1865-67 : Série III. Tome 1-7. 8vo. Paris, 1867-70
: Annuaire, année 3, 4. 12mo. Paris, 1861-62
Costard (George):
: A letter to Martin Folkes, Esq., President of the Royal Society, concerning the rise and progress of Astronomy
amongst the Antients. 8vo. London, 1746  ——: A further account of the rise and progress of Astronomy
amongst the Antients, in three letters to Martin Folkes,
Esq., President of the Royal Society. 8vo. Oxford, 1748
: The History of Astronomy, with its application to Geo- graphy, History, and Chronology; occasionally exemplified
by the globes.  4to. London, 1767
Cotes (Roger):
——: Harmonia mensurarum, sive analysis & synthesis per rationum & angulorum mensuras promotæ: accedunt alia opuscula mathematica Edidit et auxit Robertus Smith 2 parts in 1 vol. 4to. Cantabrigie, 1722
: Hydrostatical and pneumatical lectures. Second edition, by Robert Smith. 8vo. Cambridge, 1747
: De descensu gravium, de motu pendulorum in cycloide, et de
motu projectilium. 4to. Cantabrigiæ, 1770
——: Correspondence, see Newton and Cotes.
Coulier (Ph. J.):  ——: Dictionnaire d'astronomie, mise à la portée des gens du
monde, et appliquée à la marine, la géodésie, et la gnomo- nique.  12mo. Paris, 1824
: Guide des marins pendant la navigation nocturne, ou description générale des Phares, Fanaux, &c., construits pour la sûreté de la navigation.  8vo. Paris, 1829
Coulvier-Gravier (—):
*Catalogue des Globes filants (bolides) observés de 1841 à 8vo. Paris, 1854
Coulvier-Gravier (—) et Jacques Frédéric Saigey:
Recherches sur les étoiles filantes Introduction historique. 8vo. Paris, 1847

Geometry made easy, or a new and methodical explanation of

A treatise on the parallactic angle . . . . to which is added an appendix, containing a compleat set of Solar and Lunar tables, entitled *Tabulæ Dunelmenses*. 4to. London, 1766

4to. Paris, 1787

8vo. London [1752]

2 vols. 4to. Paris, an IV (1796)

- : Introduction à l'étude de l'astronomie physique.

- : Traité de calcul différentiel et de calcul intégral.

Cousin (Jacques Antoine Joseph):

the elements of Geometry.

Cowley (John Lodge):

[Cowper (Spencer)]:

#### Crabtree (William), see Horrox (J.) Cracow, Sternwarte: ---: Resultate der an der Cracauer Sternwarte gemachten meteorologischen und astronomischen Beobachtungen (von M. Weisse). 4to. Krakan, 1839 --- : Allgemeine Uebersicht der an der K.K. Krakauer Sternwarte vom Jahre 1826 bis 1852 gemachten meteorologischen Beobachtungen, zusammengestellt von Max Weisse. 4to. Krakau, 1853 — : Sternbedeckungen und Mondsterne beobachtet auf der K.K. Sternwarte in Krakau. Herausgegeben von M. Weisse. 4to. Krakau, 1855 - : See also Weisse (Maximilian). Cramer (Gabriel): Introduction à l'analyse des lignes courbes algébriques. 4to. Genève, 1750 Crawford and Balcarres (Earl of): - : Notes and suggestions to observers of the transit of Mercury, May 6, 1878. 4to. London, 1878 — : See also Dun Echt Observatory. Creed (the) of Saint Athanasius proved by a mathematical parallel. 8vo. London, 1830 Crelle (A. L.): Rechentafeln, welche alles Multipliciren und Dividiren mit Zahlen unter Tausend ganz ersparen; bei grösseren Zahlen aber die Rechnung erleichtern und sicherer machen. 2 vols. 8vo. Berlin, 1820 Crellin (William): Complete Traverse table. 4to. Melbourne, 1881 Cremoninus (Cæsar): Apologia dictorum Aristotelis de callido innato adversus Galenum. 4to. Venetiis, 1626 Creswell (Daniel): ---: An elementary treatise on the geometrical and algebraical investigation of maxima and minima . . . . to which is added a selection of propositions deducible from Euclid's 8vo. Cambridge, 1812 -: Treatise on spherics, comprising the elements of spherical

Creswell (Daniel) - continued.

geometry, of plane and spherical trigonometry, together with a series of trigonometrical tables.

8vo. Cambridge, 1816

Crisp (John):

On the methods of determining terrestrial longitudes by the Moon's Right Ascension, as deduced from her altitudes and culminations.

4to. Calcutta, 1827

Croft (Thomas):

The self-propagating nature of centrifugal force as it affects our earth and other portions of our solar system.

8vo. Papeete (Tahiti), 1875

Croll (James):

— : On ocean currents. Part 3. On the physical cause of ocean currents.

8vo. London, 1874

- : \*On the physical cause of ocean-currents.

8vo. London, 1874

---: Climate and time in their geological relations: a theory of secular changes of the earth's climate. 8vo. London, 1875

Crosier (E. S.):

\*Total Eclipse of the Sun, Saturday, August 7th, 1869. 8vo. Albany, 1869

Crosland (Newton):

The Astronomy of the future.

8vo.

Crossley (Edward), Joseph Gledhill, and James M. Wilson:

: A Handbook of double stars, with a catalogue of twelve hundred double stars and extensive lists of measures.

8vo. London, 1879

---: Corrections; together with notes, criticisms, recent measures and discoveries, &c. 8vo. London, 1880

Croucher (Joseph):

Analytical hints on the patent Marine Time-keeper.

8vo. London, n.d.

Crüger (Melchior) et J. A. Stempel:

De immobilitate Terræ. [Inaugural Dissertation.]

4to. Wittebergæ, 1659

Cruls (Luiz):

Observatoire Impérial de Rio-de-Janeiro. Mémoire sur Mars.

Taches de la planète et durée de sa rotation d'après les observations faites pendant l'opposition de 1877.

8vo. Rio de Janeiro, 1878

Cumming (Alexander):

The elements of clock and watch work, adapted to practice.
In two essays.

4to. London, 1766

Cunitia [Cunitz] (Maria):

Urania propitia, sive tabulæ astronomicæ mirè faciles, vim hypothesium physicarum à Kepplero proditarum complexæ . . . . [Lat. & Ger.] 2 parts in 1 vol. fol. Olsnæ, 1650 Cunn (Samuel):

: A new and compleat treatise of the doctrine of fractions....
to which is added an epitome of duodecimals, and an idea
of measuring. Second edition. 8vo. London, 1718

-----: A new treatise of the construction and use of the Sector . . . . Revised by Edmd. Stone. 8vo. London, 1729

Cunningham (John):

An inquiry into the Copernican system . . . . wherein it is proved in the clearest manner that the Earth has only her diurnal motion, and that the Sun revolves round the world.

8vo. London, 1789

Cursory thoughts on some natural phenomena, bearing chiefly on the primary cause of the succession of new species, and on the unity of force. 8vo. New York [1862]

Cuvier (Georges), Baron:

Essay on the theory of the earth . . . . with geological illustrations by Professor Jameson. Fifth edition.

8vo. Edinburgh, 1827

Cysat (J. B.), Life, see Wolf (R.).

D'Abbadie (Antoine), see Abbadie (A. d').

Dacosta (Alvaro Telles):

Disputatio philosophica inauguralis de Maculis Solis.

4to. Trajecti ad Rhenum, 1734

D'Agelet, see Agelet (J. L. d').

Daguerre (L. J. M.):

Historique et description des procédés du Dagnerréotype et du diorama.

8vo. Paris, 1839

D'Alembert, see Alembert (J. le Rond D').

Dalrymple (A.):

Longitude. A full answer to the advertisement concerning Mr. Earnshaw's time-keeper. 8vo. London, 1806

Dalton (John):

— : Meteorological observations and essays. 8vo. London [1793] — : Mathematical and philosophical writings, see Wilkinson

(T. T.).

Damoiseau (Mar. Ch. Théodore de):

- : Tables de la lune, formées par la seule théorie de l'attraction, et suivant la division de la circonférence en 400 degrés.

4to. Paris, 1824

—— : Tables de la lune, formées par la scule théorie de l'attraction, et suivant la division de la circonférence en 360 degrés.

fol. Paris, 1828

4to. Paris, 1836

- : Continuation of ditto, see Todd (D. P.).

Daniels (William H.):

An hypothesis of the Universe.

4to. circular [London, 1876]

 $a_2$ 

Danti (Egnatio):

Primo volume dell' uso et fabbrica dell' Astrolabio et del Planisferio . . . nuovamente ristampato . . . con l'aggiunta dell' uso & fabbrica di nove altri istromenti astronomici. 4to. Firenze, 1578

Darby (W. A.):

The Astronomical Observer. A hand-book to the Observatory and common telescope. 8vo. London, 1864

D'Arrest, see Arrest (H. L. d').

Da Rocha, see Monteiro da Rocha.

Dates:

L'Art de vérifier les dates des faits historiques, des inscriptions, des chroniques, et autres anciens monuments . . . . par un religieux de la congrégation de Saint-Maur.

42 vols. 8vo. Paris, 1819-30

Daussy (P.):

- = : \*Table des positions géographiques des principaux lieux du globe (extrait de la Connaissance des Temps, 1837, '51, '54, '56).

  8vo. Paris
- ---: \*Second mémoire sur les marées des côtes de France.

8vo. Paris

— : Extrait du voyage en Turquie et en Perse exécuté . . . pendant les années 1846-48 par Xavier Hommaire de Hell. Partie géographique. 8vo. Paris, 1859

Davidson (John):

A system of practical mathematics. 8vo. Edinburgh, 1817

Davies (Charles):

---: Elements of the differential and integral calculus.

8vo. Philadelphia, 1844

Elements of algebra, on the basis of M. Beurdon, embracing Sturm's and Horner's theorems, and practical examples.

8vo. New York, 1855

Davies (Thomas Stephens):

\*An inquiry into the geometrical character of the hour-lines upon the antique sun-dials. 4to. Edinburgh, 1831

Davis (Charles Henry):

Tables of the Moon, constructed from Plana's theory, with Airy's and Longstreth's corrections, Hansen's two inequalities of long period arising from the action of Venus, and Hansen's values of the secular variations of the mean motion and of the motion of the perigee. Arranged in a form designed by B. Peirce.

4to Washington, 1853

: Tables of the Moon's parallax, constructed from Walker's and Adams's formulæ, arranged as a supplement to the first

edition of Peirce's Tables of the Moon.

4to. Washington, 1854

[Davis, (John)]:

The Seaman's secrets, devided into two parts; wherein is taught the three kindes of sayling, horizontal, paradoxal, and sayling upon a great circle . . . 2 parts, 4to. London, 1657

Davis (John E.), and Percy L. H. Davis:

Sun's true bearing, or azimuth tables, computed for intervals of four minutes between the parallels of latitude 30° N. and 30° S. inclusive, with variation chart. Svo. London, 1877

Davis (William):

An easy and comprehensive description of the terrestrial and celestial globes, with their several uses . . . . Second edition.

Davy (Sir Humphry):

On the safety lamp for coal mines; with some researches on flame.

8vo. London, 1818

— : Six discourses delivered before the Royal Society . . . . on the award of the Royal and Copley medals; preceded by an address . . . on the progress and prospects of Science.

4to. London, 1827

Dawes (John):

Elements of fluxions.

8vo. Birmingham, 1821

[Dawson (John)]:

Four propositions, &c., shewing not only that the distance of the Sun, as attempted to be determined from the theory of gravity by a late author, is upon his own principles erroneous, but also that it is more than probable this capital question can never be satisfactorily answered by any calculus of the kind.

8vo. Newcastle, 1769

Day (James):

Journal of psychological meteorology with ephemeris.

8vo. London [1852]

Dealtry (William):

The principles of fluxions, designed for the use of students in the Universities. . . . Second edition.

Svo. Cambridge, 1816

Dean de Luigné (Ch.):

L'Hélice dans les mouvemens planétaires.

8vo. Château-Gontier, 1852

Debenham (John):

A new theory of the tides; in which the errors of the usual theory are demonstrated, and proof shown that the full Moon is not the cause of a concomitant spring tide, but actually the cause of the neaps.

8vo. London, 1846

Decimal quotients (a tabular series of) for all the proper vulgar fractions, of which, when in their lowest terms, neither the numerator nor the denominator is greater than 1000.

8vo. London, 1823

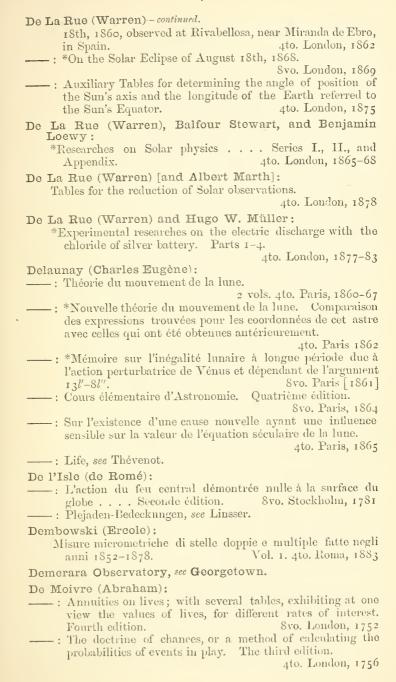
Decimal Association, Proceedings: with an introduction by Professor De Morgan.

8vo. London, 1854

Decuppis (Pompilio):

Aleune osservazioni fatte sopra Saturno nell' Osservatorio del Collegio Romano. 8vo. Roma, 1838

Dee (John):
Parallaticae commentationis praxeosque nucleus quidam. 4to. Londini, 1573
De Forest (E. L.):
: *Interpolation and adjustment of series.
8vo. New Haven, 1876 : *On an unsymmetrical law of error in the position of a point in space.  8vo. Connecticut, 1884
Deichmann (A. H.):
New Tables to facilitate the practice of great circle sailing, together with an application of the theory of the great circle on the globe to the sailing.  8vo. Hanover, 1856
Deinse (Ant. Jac. van):
Dissertatio astronomica inauguralis, exhibens determinationem orbitae Cometae detecti a Cl. de Vico, die 20 m. Februarii a. 1846.  4to. Lugduni-Batavorum, 1849
Delambre (Jean Baptiste Joseph):
<ul> <li>: Méthodes analytiques pour la détermination d'un Arc du Méridien précédées d'un mémoire sur le même sujet par A. M. Legendre. 4to. Paris, An VII(1799)</li> <li>: Abrégé d'Astronomie, ou leçons élémentaires d'astronomie théorique et pratique. 8vo. Paris, 1813</li> <li>: Astronomie théorique et pratique. 3 vols. 4to. Paris, 1814</li> <li>: Tables écliptiques des satellites de Jupiter, d'après la théorie de M. le Marquis de Laplace, et la totalité des Observations</li> </ul>
faites depuis 1662 jusqu'à l'an 1802. 4to. Paris, 1817  : Histoire de l'Astronomie Ancienne. 2 vols. 4to. Paris, 1817  : Histoire de l'Astronomie du moyen âge. 4to. Paris, 1819  : Histoire de l'Astronomie Moderne. 2 vols. 4to. Paris, 1821  : Histoire de l'Astronomie au dix-huitième siècle publiée par M. Mathieu. 4to. Paris, 1827  : Tables des satellites de Jupiter, see Bouvard et Delambre.  : See also Borda (J. Ch. de).  : Life, see Dupin (C.)
Delambre (Jean Baptiste Joseph) et J. T. Bürg:
Tables du Soleil, par M. Delambre. Tables de la Lune, par M. Bürg. (Tables astronomiques publiées par le Bureau des Longitudes, première partie.) 4to. Paris, 1806
Delambre (Jean Baptiste Joseph) et Pierre François André Méchain:
<ul> <li>: Base du système métrique décimal, ou mesure de l'arc du méridien compris entre les parallèles de Dunkerque et Barcelone exécutée en 1792 et années suivantes. (Suite des Mémoires de l'Institut.)</li> <li>: Continuation, see Biot (J. B.) et D. F. Arago.</li> </ul>
De La Rue (Warren):
: *Report of celestial photography in England.  8vo. London, 1860
: *The Bakerian Lecture. On the total solar eclipse of July



#### 88 Demonville: Question de Longitude sur Mer. (Mémoire explicatif des phénomènes de l'aiguille aimantée.) 2 parts, 8vo. Paris, 1833 Do Morgan (Augustus): --: The Elements of Arithmetic. 12mo, London, 1839 - : Ditto. Third edition. 8vo. London, 1835 ---: \*On the general equation of curves of the second degree. 4to. Cambridge, 1831 ---: \*On the general equation of surfaces of the second degree. 4to. Cambridge 1832 The elements of algebra, preliminary to the differential calculus. 8vo. London, 1835 —: Elements of spherical trigonometry. (Library of Useful Knowledge.) Svo. London, 1835 ---: The connexion of number and magnitude; an attempt to explain the fifth book of Euclid. Svo. London, 1836 —: An explanation of the gnomonic projection of the sphere, and of such points of astronomy as are most necessary in the use of astronomical maps. 8vo. London, 1836 ---: \*A treatise on the calculus of functions. [From 'Encyclopædia Metropolitana,'] 4to. London, 1836 —: Study and difficulties of mathematics. Arithmetic and algebra. Examples of the processes of arithmetic and algebra. (Library of Useful Knowledge.) 8vo. London, 1836 --: Elements of trigonometry, and trigonometrical analysis, preliminary to the differential calculus. 8vo. London, 1837 -: Remarks on an accusation made by the proprietors of the 'Encyclopædia Metropolitana' against the author of an 'Essay on probabilities.' 12mo. London, 1838 — : An essay on probabilities, and on their application to life contingencies. (Lardner's Cabinet Cyclopædia.) Svo. London, 1838

----: On the calculation of single life contingencies.

8vo. London, [1839]

---: \*References for the history of the Mathematical Sciences.

8vo. London [1842]

: Contents of the correspondence of scientific men of the seventeenth century, printed . . . . under the superintendence of the late Professor Rigaud, from the originals in the collection of the Earl of Macelesfield.

---: The differential and integral calculus.

Knowledge.)

8vo. Oxford, 1842
(Library of Useful 8vo. London, 1842)

: \*Tables. [From 'Penny Cyclopædia.'] 8vo. London [1842–46]
: Statement in answer to an assertion made by Sir William Hamilton . . . . 8vo. London, [1847]

--- : The Globes, celestial and terrestrial . . . . to accompany the globes of the Society for the Diffusion of Useful Knowledge. . . . Second edition. 8vo. London, 1847

--: Arithmetical books from the invention of printing to the

De Morgan (Augustus)-continued.
present time; being brief notices of a large number of works,
drawn up from actual inspection. Svo. London, 1847
: Formal Logic, or the calculus of inference, necessary and probable.  Svo. London, 1847
probable. Svo. London, 1847 : *On the structure of the syllogism, and on the application
of the theory of probabilities to questions of argument and
authority, 4to. Cambridge, 1847
-: Trigonometry and double algebra. 12mo. London, 1849
: *On the symbols of logic, the theory of the syllogism, and in particular of the copula, and the application of the theory
of probabilities to some questions of evidence.
4to. Cambridge, 1850
- : Companion to the almanac for 1850, 1852, 1855. 8vo. London
: The book of almanacs, with an index of reference by which
the almanac may be found for every year, whether in old style or new, from any epoch, ancient or modern, up to
A.D. 2000. oblong, London, 1851
: *On some points of the Integral Calculus.
4to. Cambridge, 1851
: *On the authorship of the account of the Commercium Epistolicum. 8vo. London, 1852
Epistolicum. 8vo. London, 1852 : *Some suggestions in logical phraseology.
Svo. London, 1853
: *On some points in the theory of differential equations.
4to. Cambridge, 1855
: *On the syllogism, No. III., and on logic in general. 4to. Cambridge, 1858
: *A proof of the existence of a root in every algebraic equa-
tion. 4to. Cambridge, 1858
: *On the syllogism, No. 1V., and on the logic of relations.
4to. Cambridge, 1860 ——: Syllabus of a proposed system of Logic. 8vo. London, 1860
: *On the theory of errors of observation. 4to.Cambridge, 1862
-: *On the syllogism, No. V., and on various points of the
onymatic system. 4to. Cambridge, 1863
: On infinity; and on the sign of equality.  4to, Cambridge, 1865
: A budget of paradoxes.  8vo. London, 1872
- : See also Bourdon, Elements of Algebra; Decimal Association.
Do Morgan (Sophia Elizabeth):
Memoir of Augustus de Morgan with selections from
his letters. 8vo. London, 1882
Denning (William Frederick):
: Astronomical phenomena in 1872. Svo. London, 1872
: Radiazioni Meteoriche dedotte da 7512 trajettorie di stelle cadenti osservate durante l'anno 1872 dai membri dell'
Associazione Meteorica Italiana. 8vo. Torino, 1878
Dennis (Jeffery):
- : A diurnal register for the barometer and thermometer.
4to, London, 1818

Dennis (Jeffery)—continued.
: Ample instructions for the barometer and thermometer The third edition. 8vo. London, 1825
Dennis (J. C.):
A diurnal register for the barometer, sympiesometer and thermometer. 4to. London, n.d.
Dent (Caroline), see Rolleston.
Dent (Edward J.):
: Abstract of paper on pendulums presented to the British Association.
—: On the errors of chronometers, and explanation of a new
construction of the compensation-balance.
8vo. London, 1842 : On the errors of the chronometrical thermometer.
8vo. London, 1843
: A description of the dipleidoscope, or double reflecting
meridian and altitude instrument. 8vo. London, 1843
-: *A paper on the patent azimuth and steering compass.
8vo. London, 1844 : A treatise on the aneroid, a newly invented portable
barometer. Svo. London, 1849
Denza (Francesco):
: Le stelle cadenti dei periodi di Novembre 1868 ed Agosto
1869 osservate in Piemonte ed in altre contrade d' Italia.
Memoria V e VI. Svo. Torino, 1870  —: Norme per le osservazioni delle meteore luminose.
8vo. Torino, 1870
: *Sulla possibile connessione tra le Ecclissi di Sole ed il
magnetismo terrestre. 4to. Roma, 1873 —: *Osservazioni della declinazione magnetica fatte in occa-
sione delle Eclissi di Sole del 9-10 Ottobre 1874, del 5
Aprile e del 29 Settembre 1875. 4to. Roma, 1876
: La Corrispondenza Meteorologica Italiana Alpina-Appen-
nina. Relazione di FD 4to. Roma, 1877
: *Riassunto delle osservazioni meteorologiche eseguite nelle stazioni Italiane presso le Alpi e gli Appennini 1874-76,
8vo. Torino, 1878
: *Relazione tra la frequenza delle macchie solari e delle
variazioni della declinazione magnetica.
8vo. Firenze, 1878 ——: *La Corrispondenza Meteorologica Italiana Alpina-Appen-
nina. Lettera di F D 8vo. Torino, 1878
: *Intorno alla Aurora Polare del 31 Gennaio 1881.
8vo. Torino, 1881
: *Amplitudine della oscillazione diurna della declinazione magnetica ottenuta all' Osservatorio in Moncalieri,
1879–80. 8vo. Torino, 1881
: *Variation de la déclinaison magnétique déduite des obser-
vations régulières faites à Moncalieri. 8vo. Paris [1881]
: *Sulla connessione tra le eclissi di Sole ed il magnetismo terrestre. Svo. Torino, 1882
570. 1011no, 1002

Denza (Francesco)—continued.
: *La meteorologia e la fisica terrestre al III Congresso Geo-
grafico Internazionale di Venezia. 8vo. Roma, 1882
-: *Osservazioni del passaggio di Venere [1882] sul disco
solare, fatte all' Osservatorio del R. Collegio Carlo Alberto in Moncalieri. 8vo. Milano, 1883
: See also Schiaparelli (G. V.), e F. Denza.
Der Beeke (David von):
Exercitium Astronomicum circa Eclipsin Solis futuram anni
1684. 4to. Hamburgi, 1683
Derham (Rev. William):
Astro-theology, or a demonstration of the being and attributes of God, from a survey of the heavens Eighth edition.
8vo. London, 1741
Desaguliers (John Theophilus):
A course of experimental philosophy. Third edition.
2 vols. 4to. London, 1763
Des-Cartes (René): : Appendix continens objectiones quintas & septimas in
meditationes de primâ philosophia.
4to Amstelodami, 1649
: Meditationes de prima philosophia, in quibus Dei existentia,
& anime humana a corpore distinctio demonstrantur. 4to. Amstelodami, 1650
: Principia philosophiæ. 4to. Amstelodami, 1650
: Ditto. 4to. Amstelodami, 1656
- : Specimina philosophiæ, seu dissertatio de methodo rectè
regendæ rationis & veritatis in scientiis investigandæ : dioptrice et meteora. 4to. Amstelodami, 1656
Passiones, sive affectus anime. 4to. Amstelodami, 1656
——: Opera philosophica. Editio ultima.
Pogdonita ( )
Desdouits (—): Lecons élémentaires d'Astronomie.  8vo. Tours, 1844
Design and Work. Vol. 8-10. Fol. London, 1880-81
Designations (C.):
Précis d'Uranographie et de géographie, mathématique et
physique [French and German]. 8vo. Vienne, 1847
Diarian Repository, or Mathematical Register. Containing
all the mathematical questions which have been pub-
lished in the 'Ladies' Diary' from 1704 to 1760. 4to. London, 1774
Diaz (Juan Carballo y):
Sistema astronómico. 4to. Sevilla, 1870
Dick (Thomas):
: Celestial Scenery; or, the wonders of the planetary system
displayed; illustrating the perfections of the Deity and a
plurality of worlds.  8vo. London [1838]
: The practical astronomer; comprising illustrations of light and colours; practical description of all kinds of telescopes;
The coroning of the coroning of the coroning of the coroning of

Dick (Thomas)—continued.

the use of the equatorial, transit, circular, and other astronomical instruments [&c.] 8vo. London, 1845

— : Die Wunder des Himmels. Dargestellt zur Verherrlichung der Vollkommenheiten Gottes und zur Aufklärung über eine Mehrheit von Welten . . . Aus dem Englischen von F. v. Eichstrom . . . . Neuer Abdruck.

8vo. Stuttgart, 1850

----: The sidereal heavens, and other subjects connected with Astronomy, as illustrative of the character of the Deity and of an infinity of worlds.

8vo. London [1859]

Dictionaries: English.

Bailey (N.): The new universal etymological English dictionary . . . . 4th edition. Svo. London, 1756

Ditto. 22nd edition. Svo. London, 1770

Johnson (Samuel): A dictionary of the English language, in which the words are deduced from their originals, and illustrated in their different significations by examples from the best writers; together with a history of the language and an English grammar, with numerous corrections . . . and additions by the Rev. H. J. Todd.

3 vols. 4to. London, 1827

Rowbotham (J.): A new derivative and etymological dictionary of such English words as have their origin in the Greek and Latin languages.

8vo. London, 1838

-: English-French.

Chambaud (Louis): Dictionnaire François-Anglois & Anglois-François . . . . Nouvelle édition . . . par J. Th. H. des Carrières. 4 vols. 8vo. London, 1815

Wessely (J. E.): A new pocket dictionary of the English and French languages . . . . Fifth edition. 16mo. Leipzig, 1873

---: English-German.

Wessely (J. E.): A new pocket dictionary of the English and German languages . . . . Fifth edition. 16mo. Leipsic, 1875

---: English-Italian.

Wessely (J. E.): A new pocket dictionary of the English and Italian languages . . . . Third edition. 16mo. Leipsic, 1874

---: English-Latin.

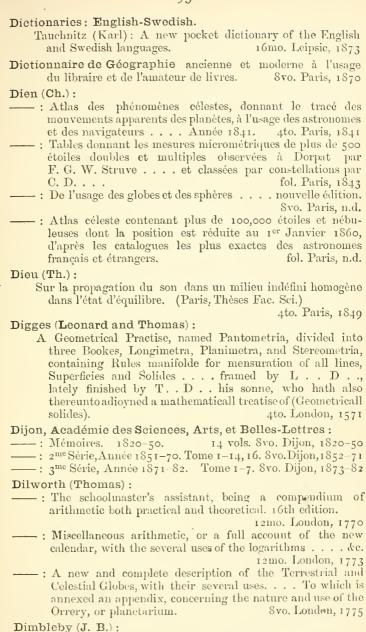
Ainsworth (Robert): Latin dictionary, improved and enlarged by the late Dr. Thomas Morell; since carefully revised . . . . by John Carey . . . . Second edition. 4to. London, 1823

---: English-Russian.

Tauchnitz (Karl): A new pocket dictionary of the English and Russian languages. 16mo. Leipsic, 1871

\_\_\_\_: English-Spanish.

Wessely (J. E.) and Gironés: A new pocket dictionary of the English and Spanish languages . . . Third edition. 16mo. Leipzig, 1874

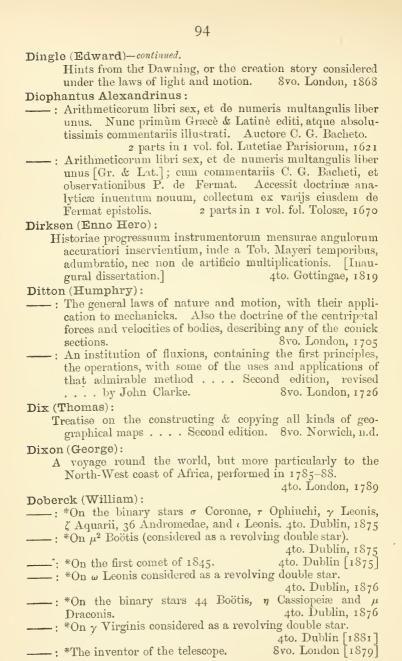


Dingle (Edward):

How globes are raised and moved; being the fourth part of

Svo. London

All past time, and almanack for 1880-81.



Dodabetta:

Meteorological Observations made at the meteorological
Bungalow on Dodabetta...in the years 1847–48, under
the direction of T. G. Taylor.

4to. Madras, 1848

Dodson (James):
: The anti-logarithmic canon; being a table of numbers consisting of eleven places of figures, corresponding to all logarithms under 100,000 to which is prefix'd an introduction containing a short account of logarithms.  fol. London, 1742
: The calculator; being correct and necessary tables for computation, adapted to science, business, and pleasure.  8vo. London, 1747
- : The mathematical repository; containing analytical solutions of five hundred questions. 3 vols. 12mo. London, 1748-55 : Ditto, second edition. Vol. 1. 12mo. London, 1775
Dodwell (Henry):
De veteribus Græcorum Romanorumque cyclis, obiterque de cyclo Judæorum ætate Christi, dissertationes decem; cum tabulis necessariis. 4to. Oxonii, 1701
Döllen (Wilhelm):
: *Neue Reduction der Königsberger Declinationen für 1820. 4to. St. Petersburg, 1849: *Ueber Dr. Wichmann's Bestimmung der Parallaxe des Argelander'schen Sterns. 4to. St. Petersburg, 1854: Die Zeitbestimmung vermittelst des tragbaren Durchgangsinstruments im Verticale des Polarsterns. 2 parts, 4to. St. Petersburg, 1863-74
Dollond (John), life, see Kelly (J.)
Domckius [Domcke] (George Peter):
Philosophiæ Mathematicæ Newtonianæ illustratæ Tomi duo. 2 vols. in one, Svo. Londini, 1730
Donati (Giovanni Battista):
- : *Della scintillazione delle stelle; con nota del Prof. O. F. Mossotti.
: *Memorie Astronomiche (Spettri stellari; Osservazioni dell' eclisse totale di sole del 18 Luglio 1860; Osservazioni di Comete 1854-60).  4to. Firenze, 1862
: *Il Sole. Svo. Firenze, 1868
: *Dei fenomeni Solari in relazione con altri fenomeni cosmici. Lezione popolare. Svo. Urbino, 1869
mici. Lezione popolare. 8vo. Urbino, 1869: *Le Aurore Boreali e la loro origine cosmica.
mici. Lezione popolare. 8vo. Urbino, 1869

Donati (Paolo): Theoriche overo speculationi intorno alli moti celesti . . . . nelle quali senza eccentrici, epicicli, spire, circitori, revolventi, ò deferrenti, con novo modo si salvano le celesti apparentie. 4to. Venetia, 1575 Donkin (W. F.): \*An essay on the theory of the combination of observations. 8vo. Oxford, 1844 Donne (Benjamin): ---: The British Mariner's Assistant; containing forty tables adapted to the several purposes of trigonometry and navigation. To which are prefixed an essay on logarithms, and navigation epitomized. . . . Second edition. 8vo. London, 1785 —: The description and use of Donn's improved navigation scale. 12mo. London, 1839 Doolittle (C. L.): Determination of the latitude and longitude of Wilkes-Barre in Luzerne County, and of Pottsville in Schuylkill County. 8vo. Harrisburg, 1884 Doppelmaier (Johann Gabriel): Atlas Coelestis . . . . secundum Nic. Copernici et ex parte Tychonis de Brahe hipothesin. fol. Norimbergae, 1742 Doppler (Christian): \*Ueber das farbige Licht der Doppelsterne und einiger anderer Gestirne des Himmels. 4to. Prag, 1842 Dorn (B.): - : \*Kurze Nachricht von zwei Astrolabien mit morgenländischen Inschriften. 8vo. St. Petersburg [1838] -: \*Ueber ein drittes in Russland befindliches Astrolabium mit morgenländischen Inschriften. 8vo. St. Petersburg [1841] Dorpat, Kaiserliche Universitäts-Sternwarte: -: F. G. W. Struve: Observationes Astronomica, instituta in Specula Universitatis Cæsareæ Dorpatensis, 1814-24, 1831-38. Vol. 1-5, 8. 4to. Dorpati, 1817-39 - : Beobachtungen der kaiserlichen Universitäts-Sternwarte. Herausgegeben von J. H. Mädler. Band 9-16. 4to. Dorpat, 1842-66 --: \*Catalogus 795 stellarum duplicium ex diversorum astronomorum observationibus. 4to. Dorpati, 1822 —: Beschreibung des auf der Sternwarte . . . . befindlichen grossen Refractors von Fraunhofer. Herausg. von F. G. W. Struve. fol. Dorpat, 1825 -: Catalogus Novus stellarum duplicium et multiplicium. . . . . auctore F. G. W. Struve. fol. Dorpati, 1827 ---: Stellarum duplicium et multiplicium mensuræ micrometricæ

. . . . auctore F. G. W. Struve.

Struve.

— : Beobachtungen des Halley'schen Cometen bei seinem Erscheinen im Jahre 1835 . . . . angestellt von F. G. W.

fol. Petropoli, 1837

fol. St. Petersburg, 1839

Dorpat, Kaiserliche Universitäts-Sternwarte-continued. -: Stellarum fixarum imprimis duplicium et multiplicium positiones mediæ pro epocha 1830.0 . . . auctore F. G. W. Struve. fol. Petropoli, 1852 - : See also Struve (F. G. W.) Douglas (George): An appeal to the republic of letters in behalf of injured science. from the opinions and proceedings of some modern authors of elements of geometry. 8vo. Edinburgh, 1810 Dowling (Daniel): - : Key to the course of mathematics, composed for the use of the Royal Military Academy, by Charles Hutton. 8vo. London, 1818 --: Ditto, with an appendix . . . . by Olinthus Gregory. Second edition. 8vo. London, 1824 Downes (John): Occultations of planets and stars by the Moon during the year 4to. Washington, 1853 [Downes (J. J.)]: The first principles of algebra, compiled for the use of mechanics and others, by a member of the Spitalfields Mechanics' Institution. 12mo. London, 1825 Downes (Olinthus Gregory): On the physical constitution of comets. 4to. London, 1860 Drach (Solomon Moses): — : Mathematical Essays . . . . No. 1. The limits of the Atmosphere barometrically defined to be below sixty miles. 4to. London, 18.10 —: \*An easy rule for formulizing all epicyclical curves with one moving circle by the binomial theorem. 8vo. London, 1849 - : \*Deductions from Mr. Glaisher's 'Meteorological Collec-8vo. London, 1851 — : On the circle-area and heptagon-chord. 8vo. (London, 1864) —: \*Observations on base-length of great pyramid, and royal coffer's dimensions. 8vo. London, 1872 ---: \*An easy general rule for filling up all magic squares. 8vo. Cambridge, 1873 Drago (Raffaele): Sulla relazione dei fenomeni meteorologici colle variazioni del magnetismo terrestre: teoria del P. A. Secchi. 8vo. Genova, 1870 Draper (Henry): —: \*Discovery of oxygen in the Sun by photography, and a new theory of the solar spectrum. 8vo. New Haven, 1877 - : \*Astronomical observations on the atmosphere of the Rocky

—: \*On photographing the spectra of the stars and planets.

Mountains.

8vo. New Haven, 1877

8vo. New Haven, 1879

Draper (Henry)—continued.  : *The total solar eclipse of July 29, 1878.
8vo. Philadelphia, 1878 : *On photographs of the spectrum of the nebula in Orion. 8vo. New Haven, 1882
: Account of. (From Anthony's Photographic Bulletin.) 8vo. New York, 1881
Praper (Henry), Charles A. Young, and E. C. Pickering:  *Researches on astronomical spectrum photography. Extracts from the original note books, with an introduction and de- scription of the apparatus by C. A. Young, and measure- ments and discussion of the plates by E. C. Pickering.  8vo. Cambridge, Mass., 1884
Draper (John William):  *Researches in actino-chemistry. Memoir second; on the distribution of chemical force in the spectrum.  8vo. New Haven, 1872-73
Drechsler (Adolph):
<ul> <li>Die Sonnen- und Mondfinsternisse in ihrem Verlaufe, oder Anleitung wie diese durch Rechnung oder Zeichnung zu ermitteln sind.</li> <li>Astronomische Vorträge über Stellung, Beschaffenheit, und Bewegung der Gestirne Zweite Auflage.</li> </ul>
8vo. Dresden, 1861
Drew (John):
.*On the adjustment of the transit circle and equatorial.
4to. London
: Manual of Astronomy: a popular treatise on theoretical, descriptive, and practical astronomy; with a familiar
explanation of astronomical instruments and the best
methods of using them. 12mo. London [1845]
: *On the instruments employed in meteorological observa-
tions. 8vo. London, 1850
: *On deductions from meteorological observations.  8vo. London, 1850
Dreyer (John L. E.):  ——: *On personal errors in astronomical transit observations.
8vo. Dublin, 1876.
*Heinrich Louis D'Arrest. 8vo. Leipzig, 1876
*A supplement to Sir John Herschel's 'General Catalogue
of Nebula and Clusters of Stars.' 4to. Dublin, 1878
: *Notes on the physical appearance of the planet Mars, as seen with the three-foot reflector, at Parsonstown, during
the opposition of 1877. 4to. Dublin, 1878 : *Note on the meteors connected with the first comet of
1870. Svo. Dublin, 1880
: *A record of the progress of astronomy during the year 1879. 8vo. Dublin, 1880
Drobisch (Moritz Wilhelm):
: Disquisitionis de vera lunae figura observationibus deter-

Drobisch (Moritz Wilhelm)—continued.
minanda pars prior [Inaugural dissertation.]
Svo. Lipsiae, 1826
: Ad selenographiam mathematicam symbolae. [Inaugural
Dissertation.] 4to. Lipsiae, 1827
Droysen (Johann Friedrich):
Ueber den Gebrauch des Hadley'schen Octanten, besonders zu
Beobachtungen auf der See. 16mo. Greifswald, 1804
Dryander (Johannes) [Johann Eychmann]:
Novi annuli astronomici, per J D excogitati, atque
hactenus, ex crebra ejusdem Instrumenti, in diversis scholis
professione, mirum in modum, aucti, Canones atque expli-
catio succincta. 4to. Marpurgi, 1536
Dryden (Johnathan):
An elementary treatise on the angular calculus, developing
the properties of n Arcs in a clear and comprehensive
manner, consisting of at least 115 formulæ not previously
published. 8vo. London, 1831
7 3
Dublin, Royal Irish Academy:
: Transactions. Vol. 1-23. 4to. Dublin, 1787-1856 : Transactions, Science. Vol. 24-28. 4to. Dublin, 1871-83
Transactions, Science, Vol. 24–28. 4to, 1960in, 1871–83
: An index to the Transactions of the Royal Irish Academy
(Vol. I-II) from 1786 to the present time, by Nicholas
Carlisle. 4to. London, 1813
—: Cunningham Memoirs, No. 1. 4to. Dublin, 1880
: Proceedings, 1836-69. 10 vols. 8vo. Dublin, 1841-70 Vol. 7 contains Index to Vols. 1-7.
Proceedings. Series 2, Vol. 1-3. Science.
8vo. Dublin, 1870-83
Dublin, Royal Society:
—: Journal. Vol. 1-7. 8vo. Dublin, 1858-78
-: Scientific Proceedings (New Series). Vol. 1-3.
8vo. Dublin, 1878–83
: Scientific Transactions. New Series. Vol. 1-3, Part 1.
4to. Dublin, 1877-83
Dubois (Edmond):
- : Cours d'astronomic. Ouvrage destiné aux officiers de la
marine Impériale, aux élèves de l'École Polytechnique, de
l'École normale, de l'École centrale, &c., et aux Licenciés ès
sciences Deuxième édition. Svo. Paris, [1865]
- : Les passages de Vénus sur le disque solaire considérés au
point de vue de la détermination de la distance du Soleil à
la terre. Passage de 1874. Notions historiques sur les
passages de 1761 et 1769. 12mo. Paris, 1873
Dubourguet (J. B. E.):
L'Art du calcul astronomique des Navigateurs.
4to. Paris, an X (1801)
Du Chastellet (G. E. Le Tonnolier de Breteuil), Marquise:
: Institutions physiques; nouvelle édition. Tome 1.
C A 1 4 4

# Du Chastellet (G. E. Le Tonnelier de Bretouil), Marquisecontinued.

---: Principes mathématiques de la philosophie naturelle.

2 vols. 4to. Paris, 1759

A translation of Newton's Principia, with commentary.

Ducom (P.):

Cours d'observations nautiques. 8vo. Bordeaux, 1820

Dudithius (Andreas), see Bosius; Erastus and others.

Dudithius (Andreas) et Thomas Erastus:

De cometarum significatione Cl. Virorum A. Duditii commentariolus, & D. Thomæ Erasti sententia. Elias Maior Vratislaviensis denuò edidit, & adjecit παράδοξον ὅτι οὐδεὶς κομήτης, ὅστις οὐκ ἀγαθὸν φέρει. 8νο. Breslæ, 1619

Dudley Observatory, Albany:

——: The Dudley Observatory and the Scientific Council. Statement of the Trustees.

8vo. Albany, 1858

- : See also Gould (B. A.)

- ----: Defence of Dr. Gould by the Scientific Council. Second edition. 8vo. Albany, 1858
- : Annals, Vol. 1, 2. Svo. Albany, 1866-71

----: Annual Report of the Astronomer for 1877.

8vo. Albany, 1878

---: See also Boss (L.)

Dufour (Ch.):

\*Mémoire sur une nouvelle méthode pour déterminer la distance de quelques étoiles. 8vo. Paris, 1868

Dufresnoy (Lenglet):

Tablettes chronologiques de l'histoire universelle sacrée et prophane, ecclésiastique et civile, depuis la création du monde, jusqu'à l'an 1762. 2 vols. 8vo. Paris, 1763

Du Hamel (Jean Baptiste):

Astronomia physica, seu de luce, natura, et motibus corporum cælestium libri duo . . . . Accessere Petri Petiti Observationes aliquot eclipsium solis et lunæ, cum dissertationibus de latitudine Lutetiæ, declinatione magnetis, nec non de novo systemate mundi quod anonymus dudum proposuit.

4to. Parisiis, 1660

Duhamel (J. A. Mazure):

Mémoire sur l'astronomie nautique.

4to. Paris, 1822

[Du Hamel, le Duc]:

Diverses méthodes pour connaître à la mer saus observations nautiques l'avance et le retard absolu des Chronomètres sur le temps moyen du lieu où ils ont été réglés.

4to. Londres, 1832

Dumont d'Urville (Jul. Séb. Cés.):

Voyage au pôle Sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée, exécuté . . . . pendant les années 1837-40. Hydrographie, par Vincendon-Dumoulin.

8vo. Paris, 1843

#### Dun Echt Observatory:

---: Publications, Vol. 1, 2. 4to. Dun Echt, Aberdeen, 1876-77

Vol. 1. A summary or index of the measurements in the 'Stellarnm duplicium et multiplicium mensuræ micrometricæ'; 'Additamentum in . . . mensuras micrometricas' . . ; including all the stars in the 'Synopsis observationum de stellis duplicibus in Specula Dorpatensi, 1814-24 . .'; and in the 'H. Mensuræ Micrometricæ,'

Vol. 2. Mauritins Expedition, 1874, I.

— : Classification scheme, and index to the same, of the Library of the Observatory, by Lord Lindsay. 4to. Dun Echt, 1879

#### Dunér (N. C.):

: Mesures micrométriques d'Étoiles doubles, faites à l'Observatoire de Lund, suivies de notes sur leurs mouvements relatifs.

4to. Lund, 1876

— : \*Undersökningar övfer kärnan och die närmast kärnan liggande delarne hos 1874 års stora komet.

Svo. Stockholm, 1876

#### Dunkin (Edwin):

---: The Midnight Sky: familiar notes on the stars and planets, 4to. London [1869]

— : Obituary notices of astronomers, Fellows and Associates of the Royal Astronomical Society. Written chiefly for the Annual Reports of the Council. 8vo. London, 1879

---: See also Lardner (D.); Milner (T.)

## Dunn (Samuel):

A description of peculiar charts and tables for facilitating a discovery of both the latitude and longitude in a ship at sea.

fol. London, 1787–88

# Dunsink, Observatory of Trinity College, Dublin:

Astronomical Observations and Researches. Part 1-4.

4to. Dublin, 1870-82

# Dunthorne (Richard):

The practical astronomy of the Moon, or new tables of the Moon's motions; with precepts for computing the place of the Moon and eclipses of the luminaries. Svo. London, 1739

#### Du Petit-Thouars (Abel):

Voyage autour du monde sur la frégate *la Venus* pendant les années 1836-39. Tome 6-10. Physique, par U. de Tessan. Svo. Paris, 1842-44

# Dupin (Charles):

\*Notice nécrologique sur M. Delambre. 8vo. Paris, 1822

## Dupuis (Charles François):

: \*Mémoire sur l'origine des constellations, et sur l'explication de la Fable, par le moyen de l'astronomie . . . . extrait de l'Astronomie de M. de la Lande, Tome 4.

4to. Paris, 1781

: Mémoire explicatif du Zodiaque chronologique et mythologique.
4to. Paris, 1806
: Dissertation sur le Zodiaque de Dendra, 12mo. Paris, 1822

Dupuy (L.):

\*Exposition de la méthode de Hansen relative au calcul des perturbations des petites planètes. 8vo. Bordeaux, 1874

Durban, Natal Observatory:

Report on the Natal Observatory (by E. Neison).

fol. Durban, 1883

Durham, Observatory of the University:

Results of Astronomical Observations made . . . . from 1846 to 1852, under the direction of the Rev. Temple Chevallier, by the Rev. R. A. Thompson and R. C. Carrington.

2 vols. 8vo. Durham, 1846-55

Durret (Noel):

Novæ motuum cælestium Ephemerides Richelianæ, annorum 15, ab anno 1637 incipientes, . . . . quibus accesserunt in priori parte: 1. Isagoge in Astrologiam. 2. De aeris mutatione; 3. Doctrina primi mobilis . . . . In secunda parte: 1. Usus tabularum . . . ; 2. De crisium mysterio tractatus; 3. Gnomonices liber unus. 4to. Londini, 1647

Du Séjour (Ach. P. Dionis):

— : Essai sur les Comètes en général, et particulièrement sur celles qui peuvent approcher de l'orbite de la terre.

8vo. Paris, 1775

— : Traité analytique des mouvemens apparens des corps célestes. 2 vols. 4to. Paris, 1786–89

Du Villard de Durand (E. E.):

Nouvelle formule pour trouver la hauteur des lieux par celles du baromètre et du thermomètre. 8vo. Paris, 1826

Dyer (John):

The spherical form of the earth. A reply to 'Parallax.' 8vo. London, n.d.

Earnshaw (Thomas):

— : Longitude: an appeal to the public, stating Mr. Thomas Earnshaw's claim to the original invention of the improvements in his timekeepers. 8vo. London, 1808

——: Longitude. [A broadsheet advertisement setting forth Mr. Earnshaw's claim for the reward offered by the government for the improvement of timekeepers.]

----: See Dalrymple (A.)

Earnshaw (Thomas) and John Arnold:

Explanation of Timekeepers. Published by order of the Commissioners of Longitude.

4to. London, 1806

Earth not a globe! An experimental inquiry into the true figure of the earth; proving it a plane, without axial or orbital motion, and the only material world in the Universe! by 'Parallax.' 8vo. Bath, 1865

Eastman (J. R.):

----: \*Report on the difference of longitude between Washington and Detroit, Michigan; Carlin, Nevada; and Austin, Nevada.

Variantee (1974) 1874

Eastman (J. R.) -continued. ---: \*Report on the difference of longitude between Washington and Ogden, Utah. 4to. Washington, 1876 -: \*A value of the solar parallax from meridian observations of Mars at the opposition in 1877. 4to. Washington, 1881 - : \*Internal contacts in transits of the inferior planets. 8vo. Salem, Mass., 1883 - : See also Washington, U.S. Naval Observatory. Eastman (J. R.) and Henry S. Pritchett: \*The longitude of the Morrison Observatory, Glasgow, Mo. 4to. Washington, 1881 Ecce Cœlum, or parish astronomy. In six lectures. By a Connecticut pastor. Nineteenth edition. Svo. Boston, 1867 Eclipse races, . . . . being an impartial account of the celestial coursers and their riders, starting together April 1, 1764 4to. London, 1764 . . . . By Philo-Pegasus. Eclipse, Solar (1715): ---- : Geographische und astronomische Beschreibung der entsetzlichen grossen Sonnen-Finsterniss welche in diesem 1715ten Jahr den 3. May wird zu sehen seyn. 4to. Leipzig, 1715 - : Ditto, 1870, see Italian Eclipse Expedition. Eder (J. M.): The chemical effect of the spectrum. Translated and edited 8vo. London, 1883 by Capt. W. de W. Abney. Edinburgh Astronomical Institution (laws of the). 8vo. Edinburgh, 1815 Edinburgh Philosophical Journal, exhibiting a view of the progress of discovery in Natural Philosophy, Chemistry, Natural History [&c.] Conducted by D. Brewster and R. 14 vols. 8vo. Edinburgh, 1819 26 Jameson. Edinburgh New Philosophical Journal, exhibiting a view of the progressive improvements and discoveries in the sciences and the arts. Conducted by R. Jameson. Vol. 1-28. 8vo. Edinburgh, 1826-40 Edinburgh, Royal Observatory: ---: Astronomical observations made . . . . by Thomas Henderson and Charles Piazzi Smyth, 1834-77. Vol. 1-14. 4to. Edinburgh, 1838-77 Vol. I-10 by Thomas Henderson. Vol. 6-10 reduced and edited by C. P. Smyth. Vol. 11-14 by C. P. Smyth. Vol. 14 Edinburgh Star Catalogue, R.A. oh to 3h. - : Some remarks on the present state and future prospects of the Observatory of the Astronomical Institution of Edin-Svo. Edinburgh, 1846 -: \*Scottish Meteorology, 1856-71, computed at the Royal Observatory, Edinburgh (from the observations of the Scottish Meteorological Society). 4to. Edinburgh [1871]

$\mathbf{E}$ dinb	urgh,	Royal	Society:
-------------------	-------	-------	----------

progress of learned societies [&c.] 8vo. Edinburgh, 1863

Egidy (Heinrich Eduard von):

Das Weltall, oder populäre Darstellung der Astronomie. . . II. Theil. Kometen, Astronomie, und Astrologie. Zweite Auflage. 8vo. Zittau und Leipzig, 1845

Eichhorn (Johann Aegidi):

Die Erscheinung der Venus in der Sonnenscheibe, als eine sehr seltene und weil die Welt stehet nur einmal bemerkte Himmelsbegebenheit; welche zum andernmal den 6. Jun. dieses Jahrs Vormit. erscheinen wird. 4to. Nürnberg, 1761

#### Eiffe (John Sweetman):

Account of improvements in chronometers. . . . . With an appendix containing Mr. Robert Molyneux's specification of a patent for improvements in chronometers.

4to. London, 1842

# Electrical News and Telegraphic Reporter. Vol. 1.

4to. London, 1875

Eliander (Johann Baptista):

Cometische hohe Himmels-Ruthe, so der allmächtige Gott in Frühling dieses weit-aussehenden 1672sten Jahrs Nordwestenwerts zur Abendzeit unter den gestirneten Perseo uns zur Busse nebenst mehrern nachdencklichen Wunderzeichen vorgestellt. 4to. Leipzig, 1672

# Elkin (William L.):

Über die Parallaxe von a Centauri. Inaugural Dissertation. 4to, Karlsruhe, 1880

Ellery (R. L. J.), see Melbourne Observatory.

# Ellis (Alexander J.):

Algebra identified with geometry; in a series of five tracts. 8vo. London, 1874

#### Ellis (George E.):

Memoir of Sir Benjamin Thompson, Count Rumford, with notices of his daughter. Published . . . . by the American Academy of Arts and Sciences. 8vo. Philadelphia [1873]

#### Ellis (William):

--: \*On the relation between the diurnal range of magnetic declination and horizontal force, as observed at the Royal Observatory, Greenwich, 1841–1877. 4to. London [1880]

---: \*On the Greenwich sunshine records, 1876-80. 8vo. London, 1880

#### Emerson (William):

[---]: The projection of the sphere, orthographic, stereographic, and gnomonical. 8vo. London, 1740

[——]: Ditto, second edition. 8vo. London, 1769 -: The principles of mechanics; explaining and demonstrating

Emerson (William)—continued.
the general laws of motion, the laws of gravity, motion of
descending bodies 8vo. London, 1754
- : The doctrine of fluxions; not only explaining the elements
thereof, but also its application and use in the several parts
of mathematics and natural philosophy. The second
edition 8vo. London, 1757
-: The method of increments, wherein the principles are de-
monstrated, and the practice thereof shewn in the solution
of problems. 4to. London, 1763
-: Cyclomathesis; or an easy introduction to the several
branches of the mathematics.  The Elements of Geometry.  8vo. London, 1763  8vo. London, 1763
: The Elements of Geometry. 8vo. London, 1763  []: Navigation, or the art of sailing upon the sea, containing a
demonstration of the fundamental principles of this art
Second edition. 12mo. London, 1764
-: A treatise of algebra, in two books. Svo. London, 1764
: The elements of trigonometry, containing the properties,
relations and calculations of sines, tangents, secants, &c.
Second edition, with tables of sines, tangents, &c., and
logarithms. 8vo. London, 1764
-: The arithmetic of infinities, and the differential method;
illustrated by examples. 8vo. London, 1767
— The elements of optics, in four books, I. Simple optics.
2. Catoptrics. 3. Dioptrics. 4. The construction of optical
instruments.   Part 2.   Perspective.
2 parts in 1 vol. 8vo. London, 1768
— : Mechanics, or the doctrine of motion. 8vo. London, 1769
: The laws of centripetal and centrifugal force, shewing the
motion of bodies in circular orbits, and in the conic sections and other curves.  8vo. London
and other curves. 8vo. London : A system of astronomy, containing the investigation and
demonstration of the elements of that science.
8vo. London, 1769
-: The art of surveying, or measuring land. 8vo. London, 1770
—: Calculation, libration, and mensuration; or the arts of
reckoning, weighing and measuring. 8vo. London, 1770
: Chronology, or the art of reckoning time founded
upon astronomical principles. 8vo. London, 1770  [——]: The doctrine of combinations, permutations, and composi-
[——]: The doctrine of combinations, permutations, and composi-
tions of quantities, clearly and succinctly demonstrated.
8vo. London, 1770
: A short comment on Sir I. Newton's Principia, containing
notes upon some difficult places of that excellent book.
8vo. London, 1770
- : Miscellanies; or a miscellaneous treatise, containing several
mathematical subjects. Svo. London, 1776
Emmanuel (Charles):
: Astronomie nouvelle, ou erreurs des Astronomes
Seconde édition. 12mo. Paris, 1853
: Conférences astronomiques. Première conférence, précédée d'une lettre à l'Académie. 12100. Paris, 1860

Encke (Johann.Franz):
: Die Entfernung der Sonne von der Erde aus dem Venus-
durchgange von 1761 hergeleitet. 8vo. Gotha, 1822
- : Der Venusdurchgang von 1769, also Fortsetzung der Ab-
handlung über die Entfernung der Sonne von der Erde.
8vo. Gotha, 1824  : *Ueber die nächste Wiederkehr des Cometen von Pons im
Jahr 1832. 4to. Altona, 1831
Jahr 1832. 4to. Altona, 1831  —: On Encke's Comet. Encke's dissertation contained in Nos.
ccx and ccxi of the 'Astronomische Nachrichten.' Trans-
lated from the German by G. B. Airy.
8vo. Cambridge, 1832
-: *Über die geographische Länge und Breite der Berliner
Sternwarte. 4to. Berlin, 1832
: Extract of a letter to Mr. Airy. (Ephemeris of
Encke's comet, 1842.) 4to. 1841
: Betrachtungen über die Anordnung des Sternsystems.
8vo. Berlin, 1844
— : Ueber das Verhältniss der Astronomie zu den andern Wis-
senschaften. 8vo. Berlin, 1846  : *On a new method of computing the perturbations of
planets Translated and illustrated with notes by G.
B. Airy. 8vo. London, 1852
: *Über die Existenz eines widerstehenden Mittels im Welt-
raume. Svo. Berlin, 1858
- : Ueber die Erscheinungen der Kometen. Ein Vortrag im
wissenschaftlichen Verein zu Berlin. 8vo. Berlin, 1859
: *Sur la différence de longitude des observatoires de
Bruxelles et de Berlin [trad. de l'Allemand].
4to. Bruxelles [1861]
: Observations, see Berlin, K. Sternwarte.
: Life, see Bruhns (C.)
Encyclopædia Britannica:
: 7th edition: Dissertations on the history of metaphysical
and ethical, and of mathematical and physical science,
by Dugald Stewart, Sir James Mackintosh, John Play-
fair and John Leslie. 4to. Edinburgh, n.d.
—: A review of the progress of mathematical and physical
science in more recent times, and particularly between the years 1775 and 1850 prefixed to the 8th edition.
By James D. Forbes. 4to. Edinburgh, 1858
Encyclopædia Metropolitana:
: Second division, Mixed Sciences (Electro-Magnetism, Elec-
tricity, Galvanism, Heat, Light, Chemistry, Sound).
4to. London, 1830 ——: The encyclopædia of pure mathematics. 4to. London, 1847
: The Encyclopædia of astronomy, comprising plane astro-
nomy, by Peter Barlow. Nautical astronomy, by Captain
Kater. Physical astronomy, by Sir J. F. W. Herschel.
On the figure of the earth, and on tides and waves, by
G. B. Airy. 4to. London, 1848

Encyclopædia Metropolitana—continued.  —: The Encyclopædia of experimental philosophy; comprising Magnetism, Electro-Magnetism, Electricity, Galvanism, Heat, Chemistry, Meteorology.  -: The Encyclopædia of mechanical philosophy, comprising the sciences of mechanics, hydrodynamics, pneumatics, and optics, by Peter Barlow, and treatises on Sound and Light by Sir John F. W. Herschel.  -: See also De Morgan (A.)  Enfield (William):
Institutes of natural philosophy, theoretical and experimental.  4to. London, 1785
Engel (F.) and K. Schellbach:  Explanations of the 21 plates containing the graphical representations of optics. (With Atlas in folio.) 8vo. Halle, 1856
Engelhardt (Valentinus):
Libellus de compositione et usu quadrantis astronomici ac geometrici scriptus. 4to. Erphordiæ, 1550
Engelmann (Rudolf):
— : Messungen von neunzig Doppelsternen am sechsfüssigen Refractor der Leipziger Sternwarte ausgeführt. Svo. Leipzig, 1865
: *Resultate aus Doppelstern-Messungen.
: Über die Helligkeitsverhältnisse der Jupiterstrabanten. Habilitations-Schrift. 8vo. Leipzig, 1871.
—: See also Bessel, Abhandlungen.
Englefield (Henry):  On the determination of the orbits of Comets, according to the methods of Father Boscovich and Mr. de La Place.  With new and complete tables; and examples of the calculation by both methods.  4to. London, 1793
English Mechanic (the) and World of Science. Vols.11-38. fol. London, 1870-84
English Pilot (the). fol. London, 1755
Engman (Eric):
Dissertatio astronomico-physica de Luna non habitabili. 4to. Upsalie, 1740
Engström (Folke):  *Bestämning af banan för Komet 1847 II. 4to. Lund, 1881
Enigmatical Entertainer, and mathematical associate for 1828-29.
Ennis (Jacob):
- : The origin of the stars, and the causes of their motions and their light second edition. 8vo. New York, 1868 - : Ditto, first London, from the fourth American edition.
Svo. London, 1876 : *Sequel to the 'Origin of the stars,' or the mechanical

108 Ennis (Jacob)—continued. - : \*Sequel to the 'Origin of the stars,' or the necessity of nebu-Svo. Philadelphia lar rotation. -: \*The discovery of the force which in the beginning put all the heavens and the earth in motion. 8vo. Cambridge [U.S.], 1871 ---: \*The meteors and their long-enduring trails. 8vo. Cambridge [U.S.], 1872 ---: \*The four great eras in modern astronomy. 8vo. Cambridge [U.S.], 1872 ---: \*Our sidereal system, and the direction and distance to its 8vo. Philadelphia, 1876 ---: \*Physical and mathematical principles of the nebular theory. 8vo. London, 1877 Ephemerides: Argoli (A.): Ephemerides, 1621-40; 1630-80; 1641-1700. Bartsch (J.): Planisphærium stellatum (Ephemeris V planetarum, 1624-33). Berlin: Astronomisches Jahrbuch, 1776-1886. Bologna: Novissimæ Ephemerides motuum celestium a E. Manfredio, 1715-50. -: Ephemerides motuum caelestium a P. Catureglio, 1829-44. Coimbra: Ephemerides astronomicas 1804-24, 1844-46, 1853, 1865-71, 1874-77, 1879-85. Durret (N.): Novæ motuum cælestium Ephemerides Richelianæ, 1637-51.

Gadbury (J.): Ephemerides of the celestial motions, 1672-1701.

Kepler (J.): Ephemerides novæ motuum cœlestium, 1617-20.

Leovitius (C.): Ephemeridum novum atque insigne opus, 1556-1606.

London: Nautical Almanac, 1767-1887.

Milan: Effemeridi astronomiche, 1821, 1823–4, 1826–7, 1829–30, 1833–5, 1840–41, 1843–52, 1861.

Mouton (G.): Observationes diametrorum Solis et Lunæ..cum tabula declinationum Solis [&c.], 1670.

Origanus (D.): Ephemerides novæ, 1595-1630.

---: Novæ motuum cœlestium Ephemerides Brandcuburgicæ, 1595-1624.

Pagan (B. F. de): Tables astronomiques. Paris, 1681.

Palermo: Effemeridi astronomiche, 1855-56.

Paris: Connaissance des Temps, 1686, 1762-5, 1769, '71, '73, '77, '81, '84, 1806-7, 1810-85.

Ephémérides des mouvemens célestes, par Desplaces, Lacaille et Lalande, 1715-35, 1745-1800.

Perlachius (A.): Ephemerides pro anno 1531.

Pitatus (P.): Almanach novum, 1551-56.

Regiomontanus (J. de): Ephemerides astronomicæ, 1475-1506.

\_\_\_: Ephemerides, 1482-1506.

Reinieri (V.): Tabulæ motuum cælestium . . Mediceæ, 1647.

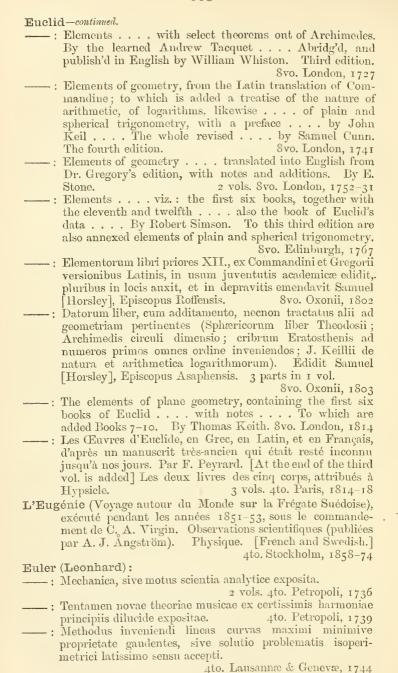
San Fernando: Almanaque Náutico, 1830-32, 34-50, 55-64, 67-85.

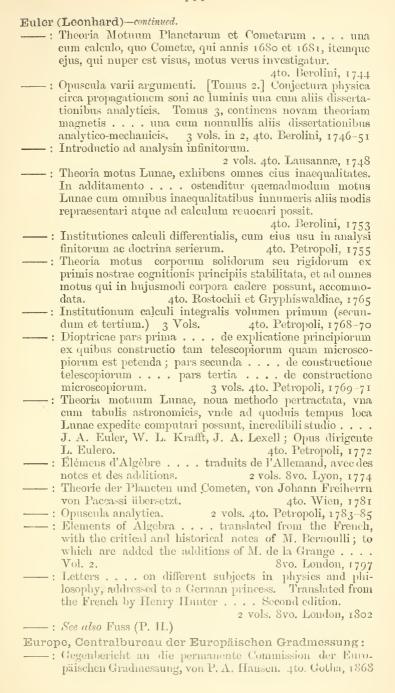
Stadius (J.): Ephemerides novæ et exactæ, 1554-70.

- : Ephemerides novæ, auctæ et repurgatæ, 1554-1600.

Stöffler (J.): Tabulæ astronomicæ. Verarum mediarumque coniunctionum et oppositionum Solis et Lunæ exactissima supputatio, 1514.

Ephemerides—continued.
Stöffler (J.): Calendarium Romanum, 1518-79.
Washington: American Ephemeris and Nautical Almanac, 1855-83.
Wing (J.): Ephemerides of the collectial motions, 1702-7.
Wing (V.): Ephemerides of the celestial motions, 1652-71.
Erastus (Thomas) [and others]:
-: De Cometis dissertationes novæ clariss, virorum Thom.
Erasti, Dudithij, Marc. Squarcialupi, Symon Grynæi.
2 parts, 4to. [Basileæ], 1580
-: See also Bosius; Dudithius.
Eratosthenes, Catasterisms. See Aratus.
·
Erlinger (Georg):
Inuhalt des planetischen Wercks. 4to. Augspurg, 1516
Ertborn (Octave van):
*Observations de la planète Vénus en 1876.
8vo. Bruxelles, 1877
E[sper] (J. F.):
Anweisung den Lauf eines Cometen und andere Gestirne
ohne astronomische Instrumenten und mathematische
Rechnungen zu beobachten. 8vo. Erlangen, 1770
Essler (Joannes): Speculum Astrologorum, see Purbach.
Euclid:
- : The elements of geometrie of the most auncient Philosopher
Euclide of Megara. Faithfully (now first) translated into
the Englishe toung by H. Billingsley, citizen of London
with a very fruitfull preface made by M. I. Dee.
fol. London (1570)
—: Euclidis Elementorum Libri XV. Unà cum scholijs anti-
quis. À Federico Commandino Urbinate nuper in Latinum
conversi, commentarijsque quibusdam illustrati.
4to. Pisauri, 1572
: Elementorum libri XV., Græcè & Latinè.
8vo. Parisiis, 1573
- : Elementorum libri XV., breviter demonstrati operâ Is.
Barrow. 12mo. Cantabrigiæ, 1655
- : The English Euclide, being the first six elements of
geometry, translated out of the Greek, with annotations
and useful supplements. By Edmund Scarburgh.
fol. Oxford, 1705
: Elements; the whole fifteen books compendiously demon-
strated, with Archimedes's theorems of the sphere and
cylinder By Isaac Barrow. To which is annex'd
Euclide's Data with Marinus's preface, and a brief treatise
of regular solids. 8vo. London, 1722
: Elementa Euclidea geometriæ, planæ ac solidæ, et selecta
ex Archimede theoremata, quibus accedit trigonometria,
anctore Andrea Tacquet [edidit] Gulielmus Whiston.
8vo. Amstelodami, 1725
- : The elements of Euclid explain'd By Claud. Francis
Milliet de Chales. Seventh edition. 8vo. London, 1726
: The six first, together with the eleventh and twelfth books
of Euclid's elements. By Henry Hill. 4to. London, 1726





# Europe, Centralbureau der Europäischen Gradmessungcontinued.

-----: Verhandlungen der vom 13. bis 16. September 1880 zu München abgehaltenen sechsten allgemeinen Conferenz der Europäischen Gradmessung. 4to. Berlin, 1881

— : Verhandlungen der vom 11. bis 15. September 1882 im Haag vereinigten permanenten Commission der Europäischen Gradmessung. 4to. Berlin, 1883

---: \*Unification des Longitudes par l'adoption d'un Méridien initial unique, et introduction d'une heure universelle. (From 'Verhandlungen,' 1883.) 4to. Berlin, 1884

# Evans (Frederick J. O.):

Chart of the curves of equal magnetic variation, 1858.

4to. London, 1859

### Evans (T. S.):

----: \*Further remarks on Dr. Bradley's theorem for computing the astronomic refraction. 8vo. London, 1816

——: \*Historical memoranda respecting experiments intended to ascertain the calorific powers of the different prismatic rays.

8vo. London, 1816

# Everest (George):

: An account of the measurement of an Arc of the meridian between the parallels of 18° 3′ and 24° 7′, being a continuation of the grand Meridianal Arc of India, as detailed by Lieut.-Col. Lambton.

4to. London, 1830

— : Rectification of logarithmic errors in the measurements of two sections of the Meridional Arc of India.

8vo. London, 1859

---: See also India, Great Trigonometrical Survey.

#### Everett (J. D.):

Illustrations of the centimètre-gramme-second (C.G.S.) system of units.

8vo. London, 1875

#### Ewbank (Thomas):

A descriptive and historical account of hydraulic and other machines for raising water, ancient and modern; with observations on various subjects connected with the mechanic arts.

Svo. New York, 1842

# Ewing (Alexander):

Practical astronomy; containing a description of the solar system; the doctrine of the sphere; the principal problems in astronomy, illustrated with many examples. Together with astronomical tables of the sun, moon, and primary planets.

8vo. Edinburgh, 1797

#### Exhibition (Great), 1851:

Reports by the Juries. Class X. Philosophical instruments and processes depending upon their use. By James Glaisher. 4to. London

# Exhibition (International), 1862:

Jurors' Reports. Chronometers, watches, and clocks.

fol. London

113 Exley (Thomas): Principles of natural philosophy, or a new theory of physics, founded on gravitation. 8vo. London, 1820 Faber Stapulensis [J. Léfévre d'Étaples]: Introductorium astronomicum, theorias corporum coelestium duobus libris complecte; adiecto commentario declaratum (Judoci Clichtonei). fol. Parisiis, 1517 Falconer (William): An universal dictionary of the marine . . . . New edition. 4to. London, 1789 Fale (Thomas): Horologiographia. The art of dialling; teaching an easier and perfect way to make all kinds of dials upon any plaine plat howsoever placed. 8vo. London, [1593] Fantonius (Philippus): De ratione reducendi anni ad legitimam formam et numerum, acaliis ad eandem rem pertinentibus. Svo. Florentiae, 1560 Faraday (Michael): —: Chemical manipulation; being instructions to students in chemistry. 8vo. London, 1827 --: \* On the manufacture of glass for optical purposes. (The Bakerian Lecture, 1829.) 4to. London, 1830 - : Experimental researches in Electricity. 8vo. London, 1830 Fauro (F.): Beobachtungen der totalen Sonnenfinsterniss am 18. August 1868, angestellt von den Vätern der Gesellschaft Jesu zu Manila auf den Philippinen. Svo. Halle, 1860 Faye (Hervé Aug. Ét.): — : Leçons de cosmographie, rédigées d'après les programmes officiels d'admission à l'École Polytechnique et à l'École de Saint-Cyr. 8vo. Paris, 1852 — : Ditto, deuxième édition. Svo. Paris, 1854 ---: \*Sur les travaux sélénographiques de M. Bulard, et sur la formation des Cirques lunaires. 4to. Paris, 1858 -: \*Sur une méthode nouvelle proposée par M. de Littrow pour déterminer en mer l'heure et la longitude. Svo. Vienne, 1864 —: \*Sur la situation actuelle du Burcau des Longitudes. 4to. Paris, 1872 —: Cours d'Astronomie Nautique. 8vo. Paris, 1880 ---: Cours d'Astronomie de l'École Polytechnique. 2 vols. 8vo. Paris, 1881-83 Fearnley (C.): - : \*Nordlysets Höide bestemt ved Iagttagelse fra eet Punkt. 8vo. Christiania, 1859

Fedorenko (Ivan):

Positions moyennes pour l'époque de 1790,0 des étoiles circompolaires dont les observations out été publiées par Jérôme Lalande.

4to. St.-Pétersbourg, 1854

- : \*Om Fordelingen af den Lys og Varmemængde, som Jorden

modtager fra Solen.

j

8vo. Stockholm, 1868

114 Feilitzsch (F. C. O. von): Optische Untersuchungen veranlasst durch die totale Sonnenfinsterniss des 28 Juli 1851. 8vo. Greifswald, 1852 Fellöcker (Sigmund): Geschichte der Sternwarte der Benediktiner-Abtei Krems-4to. Linz, 1864 münster. Fenland Meteorological Circular and Weather Report. 1874-75. Edited by S. H. Miller. 4to. Wisbeach, 1874-76 Fenning (D.) and John Probert: The Method of calculating an Eclipse geometrically; with an example of the great Eclipse of the Sun, which will happen on April the 1st, between nine and ten in the morning, 8vo. London, 1764 1764. Fenwick (Stephen): — : On the motion of a projectile in a resisting medium. 8vo. Woolwich, 1859 ---: Applications of mechanics. 8vo. Woolwich, 1860 Fergola (Emmanuele): ---: \*Sopra talune oscillazioni diurne degli strumenti astronomici, e sopra una probabile causa della loro apparenza. 4to. Napoli, 1871 ---: \*Determinazione novella della latitudine del R. Osservatorio de Capodimonte. 4to. Napoli, 1873 -: \*Sulla posizione dell' asse di rotazione della Terra rispetto all' asse di figura. 4to. Napoli, 1874 ---: \*Dimensioni della Terra, e ricerca della posizione del suo asse di figura rispetto a quello di rotazione. 4to. Napoli, 1876 Fergola (Emmanuele) ed Angelo Secchi: \*Sulla differenza di longitudine fra Napoli e Roma. 4to. Napoli, 1871 Fergola (Francesco): Relazione delle operazioni geodetiche eseguite nelle provincie settentrionali del regno di Napoli. 4to. Ferguson (James): ---: A dissertation upon the phænomena of the harvest Moon, also the description and use of a new four-wheel'd Orrery, and an essay upon the Moon's turning round her own axis. 8vo. London, 1747 -: An idea of the material universe, deduced from a Survey of the Solar System. 8vo. London, 1754 -: A plain method of determining the parallax of Venus, by her transit over the Sun, and from thence, by analogy, the

> zehen Gesprächen. Aus dem Englischen übersetzt. 8vo. Leipzig, 1771

4to. London, 1761

8vo. London, 1767

parallax and distance of the Sun, and of all the rest of the

— : Analysis of a course of lectures on mechanics, hydrostatics, hydraulics, pneumatics, spherics, and astronomy. . . .

---: Anfangsgründe der Sternseherkunst für die Jugend in

planets. . . . Second edition.

The fifth edition.

	son (James)—continued.
:	Astronomy explained upon Sir Isaac Newton's principles
	and made easy to those who have not studied mathematics
	to which are added a plain method of finding the distances
	of all the planets from the Sun by the transit of Venus
	over the Sun's disc, in 1761, an account of Mr. Horrox's
	observation of the transit of Venus in 1639 [&c.] New
	edition. 4to. London, 1773
:	Select mechanical exercises, showing how to construct
	different clocks, orreries, and sun-dials, on plain and easy
	principles, with several miscellaneous articles, and new
	Tables, I. for computing the time of any new or full Moon
	2. for graduating the lines on the Sector, Plain Scale, and
	Gunter; to which is prefixed a short account of the life of the author [written by himself]. 8vo. London, 1778
	the author [written by himself]. 8vo. London, 1778 An easy introduction to Astronomy, for young gentlemen
:	and ladies Fourth edition. 8vo. London, 1779
	An Astronomical lecture, on Eclipses of the Sun and Moon
:	the true year of our Saviour's crucifixion, the Supernatura
	Darkness at that time, and the prophet Daniel's Seventy
	weeks. Svo. Bristol, n.d
	Lectures on mechanics, hydrostatics, hydraulics, pneumatics
•	optics, geography, astronomy and dialing; edited by David
	Brewster. Plates. 4to. Edinburgh, 1805
	Life] see Henderson (E.)
	t (Pierre de):
τ.	Towie anone mothematica: accessment selecte angelem
: 7	Varia opera mathematica; accesserunt selectæ quædam
	eiusdem Epistolæ, vel ad ipsum de rebus ad mathe
	ejusdem Epistolæ, vel ad ipsum de rebus ad mathe- maticas disciplinas aut physicam pertinentibus scriptæ.
1	ejusdem Epistolæ, vel ad ipsum de rebus ad mathe- maticas disciplinas aut physicam pertinentibus scriptæ. fol. Tolosæ, 1679
:	ejusdem Epistolæ, vel ad ipsum de rebus ad mathe- maticas disciplinas aut physicam pertinentibus scriptæ. fol. Tolosæ, 1679 Spherical tangencies, see Apollonius.
: Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.):
: Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679 Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osser-
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ. fol. Tolosæ, 1679 Spherical tangencies, see Apollonius. i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ. fol. Tolosæ, 1679 Spherical tangencies, see Apollonius. i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880 i (Gaspare Stanislao):
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880 i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880 i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto nell' Agro Romano il 31 di Agosto 1872.  4to. Roma, 1873
Ferrar	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie
Forrar : ]	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Com-
: Ferrar *R Ferrar: ]	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872.  *Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I-XII.  4to. Roma, 1874-81
: Ferrar **R  Ferrar: ]: ;	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872.  *Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I-XII.  4to. Roma, 1874-81
Ferrar **R  Ferrar: 1	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Solpra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–81  fTerza serie delle misure micrometriche delle Stelle doppie latte all' equatoriale del Collegio Romano dal 22 Giugno dat 22 diugno dat 23 diutto il 1874.
Ferrar **R  Ferrar: 1	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Solpra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–81  fTerza serie delle misure micrometriche delle Stelle doppie latte all' equatoriale del Collegio Romano dal 22 Giugno dat 22 diugno dat 23 diutto il 1874.
Ferrar **R  Ferrar: } : * : * : *	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–81  Terza serie delle misure micrometriche delle Stelle doppie atte all' equatoriale del Collegio Romano dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 23 Giugno dal 24 Giugno dal 25 Giugno dal 26 Giugno dal 27 a tutto il 1874.  Sopra il radiante delle Stelle Cadenti del periodo di Agosto.  4to. Roma, 1875
Ferrar **R  Ferrar: ' : '	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–81  Terza serie delle misure micrometriche delle Stelle doppie atte all' equatoriale del Collegio Romano dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 23 di Agosto.  4to. Roma, 1875  Sopra il radiante delle Stelle Cadenti del periodo di Agosto.  4to. Roma, 1876
Ferrar **R  Ferrar:  :  :  :  :  :  :	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–81  Terza serie delle misure micrometriche delle Stelle doppie atte all' equatoriale del Collegio Romano dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 23 di Agosto.  4to. Roma, 1875  Sopra il radiante delle Stelle Cadenti del periodo di Agosto.  4to. Roma, 1876  Sulle protuberanze e le macchie solari osservate nel 1877  nell' Osservatorio del Collegio Romano.  4to. Roma, 1879
Ferrar **R  Ferrar:  :  :  :  :  :  :	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  Terza scrie delle misure micrometriche delle Stelle doppie fatte all' equatoriale del Collegio Romano dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 22 Giugno dal 23 a tutto il 1874.  Sopra il radiante delle Stelle Cadenti del periodo di Agosto.  4to. Roma, 1876  Scalle protuberanze e le macchie solari osservate nel 1877  dell' Osservatorio del Collegio Romano.  Obituary Notice of Angelo Secchi.]
Ferrar **R  Ferrar **R : ** : *	ejusdem Epistolæ, vel ad ipsum de rebus ad mathematicas disciplinas aut physicam pertinentibus scriptæ.  fol. Tolosæ, 1679  Spherical tangencies, see Apollonius.  i (G. F.): isposta ad una critica del Sig. F. Keller intorno alle osservazioni della declinazione magnetica fatte all' Osservatorio del Collegio Romano.  4to. Roma, 1880  i (Gaspare Stanislao): Ricerche fisico-astronomiche intorno all' uranolito caduto dell' Agro Romano il 31 di Agosto 1872. 4to. Roma, 1873  Sopra la relazione fra i massimi e minimi delle Macchie Solari e le straordinarie perturbazioni magnetiche. Communicazioni I–XII.  4to. Roma, 1874–8to. Roma, 1874–8to. Roma, 1874–187  Sopra il radiante delle Stelle Cadenti del periodo di Agosto.  4to. Roma, 1876  Sulle protuberanze e le macchie solari osservate nel 1877  fell' Osservatorio del Collegio Romano.  4to. Roma, 1876

Ferrari (Gaspar Stanislao)—continued.
1875 al 1879 all'osservatorio di Zi-Ka-Wei, nella Cina, dal
P. Marco Dechevrens. 4to. Roma, 1880
: *La luce zodiacale. 8vo. Roma, 1881
: *I recenti progressi dell' Astronomia. 8vo. Roma, 1882
-: Il calendario Gregoriano. 2ª edizione. 8vo. Roma, 1882
- : La riforma Gregoriana del calendario. 8vo. Roma, 1883
: See also Rome, Collegio Romano.
Ferrel (W.):
*The motions of fluids and solids relative to the earth's sur-
face; comprising applications to the winds and the currents
of the ocean. 4to. New York, 1860
Ferrer (José Joaquin de):
*On the determination of the parallax of the Sun from the
observations of the Transit of Venus over his disk, June 3,
1769. 4to. London, 1833
, ,
Fienus (Thomas) et Libertus Fromondus:
: De cometa anni MDCXVIII. Dissertationes eiusdem
T. Fieni epistolica questio, an verum sit, Celum moueri,
& Terram quiescere? 8vo. Antverpiæ, 1616
: Ditto. Svo. Londini, 1655
Fiévez (Ch.):
- : *Bibliographie des ouvrages, mémoires et notices de spectro-
scopie. 12mo. Bruxelles, 1878
-: *Étude du spectre solaire. 4to. Bruxelles, 1882
- : *Étude de la région rouge (A-C) du spectre solaire.
4to. Bruxelles, 1883
Filipponi (Alfonso):
Elogio del P. Giuseppe Piazzi. 8vo. Napoli, 1826
-
Filopanti (Quirico):
: Sunto della memoria sulle Geuranie ossia di alcune singolari
relazioni cosmiche della Terra e del cielo.
8vo. Bologna, 1862
: Indication de quelques nouvelles idées scientifiques exposés
dans son ouvrage 'L' Universo,' ou Essai de philosophie en-
cyclopédique. 8vo. Bologne, 1875
Finæus [Fineus, Finé] (Orontius):
- : Sphaera Mvndi, sive cosmographia qvinque libris recèns
auctis & emēdatis absoluta; in qua tum prima astronomiæ
pars, tum geographiæ ac hydrographiæ rudimenta pertrac-
tātur. 4to. Lutetiæ Parisiorum, 1552
-: De duodecim celi domiciliis, & horis inequalibus, libellus
non aspernandus.  4to. Lutetie, 1553
- : In eos quos de mundi sphæra conscripsit libros, ac in pla-
netarum theoricas, canonum astronomicorum libri II.
4to. Lutetiæ, 1553
Findlater (Andrew):
FINGBLER (AUGREW):

Findlater (Andrew):
Astronomy (Chambers's Elementary Science manuals).
8vo. Edinburgh, 1875

#### Fischer (A.):

Die Erscheinung des Halley'schen Kometen im Jahre 1835. Nach den besten astronomischen Schriften mit einer Einleitung in das Weltall zu Jedermannes Belehrung.

12mo. Stuttgart, 1835

#### Fischer (Ernst Gottfried):

Betrachtungen über die Kometen. Bey Gelegenheit der vermutheten Wiedererscheinung eines Kometen im Jahre 1789. Svo. Berlin, 1789

# Fisher (W. M.):

A philosophical dissertation on Astronomy, containing an accurate and comprehensive view of the Solar System.

Svo. Liverpool, n.d.

\*Résumé des mesures effectuées sur les épreuves daguerriennes du passage de Vénus en 1874, obtenues par la Commission 4to. Paris, 1882 française.

#### FitzRoy (Robert): see London, Board of Trade. Fizeau (H.) et A. Cornu: Flammarion (Camille): — : La pluralité des mondes habités. Étude où l'on expose les conditions d'habitabilité des terres célestes discutées au point de vue de l'astronomie, de la physiologie, et de la philosophie naturelle. . . . Nouvelle édition. Svo. Paris, 1864 — : Ditto, vingt-cinquième édition. Svo. Paris, 1877 ----: \*Changement arrivé sur la Lune. Le cratère de Linné. 4to. Paris [1867] — : Etudes et lectures sur l'Astronomie. Tome 1-8. 12mo. Paris, 1867-77 ---: \*Études météorologiques faites en Ballon. 4to. Paris, 1868 --: \*Segmentation d'une tache solaire. 4to. Paris 1868 ---: Vie de Copernic et histoire de la découverte du système du 8vo. Paris, 1872 monde. - : L'Atmosphère. Description des grands phénomènes de la Svo. Paris, 1872 Nature. ---: Ditto, deuxième édition. 8vo. Paris, 1873 4to. Paris 1873 --: \*Sur la planète Mars. - : \*Orbite apparente et période de révolution de l'étoile double & de la Grande Ourse. 4to. Paris 1873 ---: \*Phénomènes observés sur les satellites de Jupiter. 4to. Paris 1874 ---: \*Orbite de l'étoile double γ de la Vierge. 4to. Paris 1874 · --: \*Orbite apparente et période de révolution de l'étoile double η de la Couronne. 4to. Paris 1874 - : \*Orbite apparente et période de révolution de l'étoile dou-4to. Paris 1874 ble 4 d'Hereule. - : Les mondes imaginaires et les mondes réels. Voyage pit-

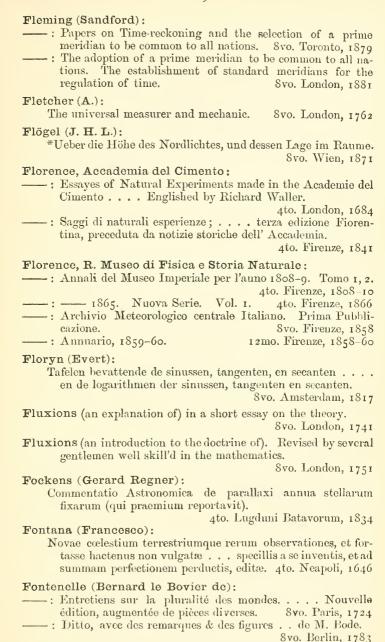
toresque dans le ciel, et revue critique des théories humaines scientifiques et romanesques, anciennes et modernes, sur les habitants des astres. Quatorzième édition.

Svo. Paris, 1876

: Petite astronomie descriptive adaptée aux besoins de
l'enseignement par C. Delon. 8vo. Paris, 1877
: Les Terres du Ciel. Description astronomique, physique,
. Les Terres du Ciel. Description astronomique, physique,
climatologique, géographique, des planètes qui gravitent
avec la terre autour du Soleil, et de l'état probable de la vie
à leur surface. 8vo. Paris, 1877
: Histoire du Ciel. Svo. Paris [1872]
. Historie du Cier.
: Les merveilles célestes, lectures du soir Sixième
édition. 8vo. Paris, 1878
: Catalogue des étoiles doubles et multiples en mouvement
relatif certain, comprenant toutes les observations faites sur
chaque couple depuis sa découverte et les résultats conclus
de l'étude des mouvements. 8vo. Paris, 1878
: Les étoiles et les curiosités du ciel ; description complète du
ciel visible à l'œil nu, et de tous les objets célestes faciles à
observer : Supplément de l'Astronomie Populaire.
8vo. Paris, 1882
: Astronomical Myths, see Blake (J. F.)
: See also Astronomie (l').
· See the Tribunite (1).
Flamsteed (John):
, , ,
: Historiæ Coelestis libri duo quorum prior exhibet catalogum
stellarum fixarum Britannicum posterior transitus
syderum per planum Arcus meridionalis. fol. Londini, 1712
: Historiæ Celestis Britannicæ Volumen primum (secundum
: Inistoriae Celestis Dritannicae voimmen primum (secundum
et tertium) observante J. F 1675-1720 in Ob-
et tertium) observante J. F 1675-1720 in Ob-
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi.  3 vols. fol. London, 1725  fol. London, 1726  fol. London, 1781
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  Atlas Cœlestis. fol. London, 1726 Ditto. fol. London, 1781 Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars,
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.]
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  Atlas Cœlestis. fol. London, 1726 Ditto. fol. London, 1781 Atlas cœleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776 See also Bode (J. E.) Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis,
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798  — : An account of the Revd. John Flamsteed, the first Astronomer
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798  — : An account of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other au-
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798  — : Anaccount of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  Atlas Cœlestis. fol. London, 1726 Ditto. fol. London, 1781 Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776 See also Bode (J. E.) Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798 An account of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is added his British Catalogue of stars, corrected and enlarged.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798  — : Anaccount of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  Atlas Cœlestis. fol. London, 1726 Ditto. fol. London, 1781 Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776 See also Bode (J. E.) Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798 An account of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is added his British Catalogue of stars, corrected and enlarged.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  Atlas Cœlestis. fol. London, 1726 Ditto. fol. London, 1781 Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776 See also Bode (J. E.) Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798 An account of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is added his British Catalogue of stars, corrected and enlarged.
et tertium) observante J. F 1675–1720 in Observatorio Regio Grenovicensi. 3 vols. fol. Londini, 1725  — : Atlas Cœlestis. fol. London, 1726  — : Ditto. fol. London, 1781  — : Atlas céleste approuvé par l'Académie Royale des Sciences, et publié sous le privilége de cette compagnie. Seconde édition. Par M. J. Fortin [with catalogue of stars, &c.] 4to. Paris, 1776  — : See also Bode (J. E.)  — : Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Cœlestis, and not inserted in the British Catalogue. By Carolina Herschel. fol. London, 1798  — : Anaccount of the Revd. John Flamsteed, the first Astronomer Royal, compiled from his own manuscripts, and other authentic documents never before published. To which is added his British Catalogue of stars, corrected and enlarged. By Francis Baily. 4to. London, 1835

# della Società Reale Borbonica, 1847. 4to. Napoli [1847] Floming (Peter):

Geometrical solutions of the quadrature of the circle.
fol. Montreal, 1850



Fonvielle (W. de): Une visite à la grande Comète de 1881. 12mo. Paris [1881]

I 20	
Forbes (George): The transit of Venus.	8vo. London, 1874
Forbes (George) and James Young:  *Experimental determination of the coloured light.	
Forbes (James D.):  —: A review of the progress of Ma Science in more recent times, and years 1775 and 1850 [Encycl. Bri  —: Address delivered to the Royal Science in the Royal	particularly between the tannica, 8th edition]. 4to. Edinburgh, 1858
<ul> <li>Forman (Walter):</li> <li>— : A new theory of the tides; shewicause of the phenomenon, and overlooked by philosophers.</li> <li>— : An essay on the laws of gravity planets; with observations on the earth, and the precession of the extraordinary conduct; and anoth the application of Kepler's third satellites of Jupiter and Saturn. 8</li> <li>— : A letter to the Secretary of Society, in refutation of some all upon philosophical subjects which</li> </ul>	ang what is the immediate which has hitherto been 8vo. Bath, 1822 y, and the distance of the he tides, the figure of the quinoxes. 8vo. Bath, 1824 on Lord Brougham's most er to Sir John Herschel on law to the periods of the vo. Shepton-Mallet [1832] the Royal Astronomical bourd & mistaken notions
that Society and by all the Newt	onian philosophers.  8vo. Shepton-Mallet, 1833  ertatio Astronomica.  4to. Bonnae, 1854  nie der Sphären. Vortrag
— : *Ephemeride des Encke'schen Co	Serliner Sternwarte.

. Do districtino por Donata
4to. Bonnae, 1854
- : Johann Keppler und die Harmonie der Sphären. Vortrag
gehalten im Wissenschaftlichen Verein zu Berlin.
8vo. Berlin, 1862
- : *Ephemeride des Encke'schen Cometen, 1868. 8vo. Berlin
— : Sammlung von Hülfstafeln der Berliner Sternwarte.
4to. Berlin, 1869
: Sammlung wissenschaftlicher Vorträge. 8vo. Berlin, 1876
— : Sammlung populärer astronomischer Mittheilungen.
8vo. Berlin, 1878
: Populäre Mittheilungen zum astronomischen Theile des
k. preuss. Normalkalenders für 1881. 8vo. Berlin, 1880

# Förster (Wilhelm) und P. Lehmann:

Die veränderlichen Tafelu des astronomischen und chronologischen Theils des königl. preussischen Normalkalenders für 1881. 8vo. Berlin, 1880

# Forster (George):

A voyage round the world in the Resolution.

Forster (Thomas):
—: Researches about atmospheric phaenomena. Second edition.
Svo. London, 1815 : The perennial calendar, and companion to the almanack.
Svo. London, 182.4
: Illustrations of the atmospherical origin of Epidemic diseases. 2nd edition. Svo. Chelmsford, 1829
: Annals of some remarkable acrial and Alpine voyages, 8vo. London, 1832
- : Observations sur l'influence des comètes sur les phénomènes
de l'atmosphère. Svo. Aix la Chapelle, 1836
- : Essai sur l'influence des comètes sur les phénomènes de la terre. Seconde édition, augmentée d'un autre sur les étoiles
filantes.  8vo. Bruges, 1843
— : Mémoire sur les étoiles filantes, ainsi que sur les météores en général, par rapport à leurs causes déterminantes.
8vo. Bruges, 1846
Fortin, J., Atlas Céleste, see Flamsteed (J.)
Foster, Chronometrical Observations, see Tiarks (J. L.)]
Foster (Samuel):  ——: Elliptical or Azimuthal Horologiography, comprehending
severall wayes of describing dials upon all kinds of super-
ficies, either plain or curved, and unto all upright stiles in
whatsoever position they shall be placed. 4to. London, 1654
—: Miscellanies, or mathematical lucubrations; published, and many of them translated into English, by
John Twysden. (Stelle Fixe; Astroscopium; De instru-
mentis planetariis; Observationes Eclipsium; Ratio com-
putandi altitudinem Solis; Problemata Geometrica; Pro-
blemata Mathematica a J. Twysden; Aristarchus de
Magnitudinibus &c. Lemmata Archimedis; Geometrical Square; projections; dialling &c.)
19 parts in 1 vol. fol. London, 1659
—: See also Gunter (E.) Foucault (Léon), see Paris, Observatoire.
Fourier (Joseph):
The analytical theory of heat Translated, with notes,
by Alexander Freeman. 8vo. Cambridge, 1878
Francœur (Louis Benjamin):
— : Traité élémentaire de mécanique. Quatrième édition. 8vo. Paris, 1807
: Cours complet de Mathématiques pures; ouvrago
destiné aux élèves des Écoles Normale et Polytechnique.
2 vols. 8vo. Paris, 1809 ——: Uranographie ou traité élémentaire d'astronomie, à l'usage
des personnes peu versées dans les mathématiques, des
géographes, des marins, des ingénieurs, &c Qua-
trième édition. Svo. Paris, 1828
- : Astronomie pratique. Usage et composition de la Connaissance des Tems. Ouvrage destiné aux astronomes, aux
marins et aux ingénicurs. 8vo. Paris, 1830

Francœur (Louis Benjamin)—continued.
— : Géodésie, ou traité de la figure de la Terre et de ses parties. 8vo. Paris, 1835
: *Sur le calendrier des Mahométans. 8vo. Paris, 1841
- : Théorie du calendrier, et collection de tous les calendriers
des années passées et futures. 12mo. Paris, 1842
Frankenheim (M. L.):
Populäre Astronomie, ohne Hülfe der Mathematik in zwanzig
Vorlesungen erläutert. Nach der dreizehnten englischen
und dritten französischen Ausgabe frei bearbeitet. 8vo. Braunschweig, 1827
A translation of 'The wonders of the heavens displayed.'
Franklin Institute, Philadelphia:
Journal. Third series. Vols. 21-87.
8vo. Philadelphia, 1851-84
Frankz (Thomas):
Πρόδρομος "Εκλειψις, being a philosophical dissertation on the Doctrine of Eclipses. Explaining the physical cause thereof
in each Luminary Also a few words on the Pytha-
gorean system with an inquiry into the nature and
laws of Comets. The second edition. 8vo. London, 1736
Frauenholz (A.):
— : Das Sonnensystem in der Vorzeit. Svo. Breslau, 1868 — : Die Sonnenflecken, was sie sind und woher sie kommen.
Eine wissenschaftliche Abhandlung begründet auf das Son-
nen-System in der Vorzeit. 8vo. Breslau, 1870
-: Die Sonne und ihre Achsendrehung: eine kurze wissen-
schaftliche Abhandlung. 8vo. Breslau, 1870
Fraunhofer (J.), Life, see Jolly (Ph.)
Freeman (A.):
Solar fictions; a free inquiry into the received astronomical doctrines and popular opinions concerning the Sun.
8vo. London, 1871
Freeman (Alexander):
-: Table shewing the time and place of the transit across the
prime vertical circle in latitude 50° 12′ 10″. 8vo. Cambridge, 1882
-: See also Cheyne (C. H. H.); Fourier (J.)
Freke (John):
An essay to shew the cause of electricity, and why some
things are non-electricable. 8vo. London, 1746
Frend (William):
: The principles of algebra, or the true theory of Equations established on mathematical demonstration. Part 2.
London, 1799
- : Evening amusements; or the beauty of the heavens dis-
played. In which several striking appearances, to be
observed on various evenings in the heavens, during the
years 1804–1822, are described. 19 vols. 8vo. London, 1806–1822

#### Fresen (Wilhelm): De computo Gregoriano, seu stylo novo. [Inaugural disser-4to. Wittebergæ, 1662 tation. Friedrich (Johann): Astrologie und Reformation; oder die Astrologen als Prediger der Reformation und Urheber des Bauernkrieges. Svo. München, 1864 Fries (Jakob Friedrich): Populäre Vorlesungen über die Sternkunde, gehalten zu Heidelberg im Winter 1811 auf 1812. 8vo. Heidelberg, 1813 Friesach (Karl): ---: \*Ueber die Reduction der grössten Sonnenhöhe auf den Meridian bei veränderlichem Beobachtungsorte. 8vo. Wien, 1863 ---: Theorie der Planetenvorübergänge vor der Sonnenscheibe. 4to. Leipzig, 1874 Frischauf (Johann): ---: \*Bahnbestimmung des Kometen 1863 II. 8vo. Wien, 1863 ---: Theorie der Bewegung der Himmelskörper um die Sonne nebst deren Bahnbestimmung in elementarer Darstellung. Svo. Graz, 1868 Frisi [Frisius], (Paolo): ---: Disquisitio mathematica in caussam physicam figuræ et 4to. Mediolani, 1751 magnitudinis telluris nostræ. - : Dissertationum variarum tomus primus (et secundus). 2 vols. 4to. Lucæ, 1759-61 ---: De gravitate universali corporum libri tres. 4to. Mediolani, 1768 ---: Cosmographiæ physicæ et mathematicæ: pars prior, motuum periodicorum theoriam continens: (pars altera, de rotationis motu et phænomenis inde pendentibus). 2 parts in 1 vol. 4to. Mediolani, 1774-75 - : Operum tomus primus, algebram et geometriam analyticam continens. (Tomus secundus, mechanicam universam et mechanicæ applicationem ad aquarum fluentium theoriam 4to. Mediolani, 1782-83 continens.) Tomi 1 & 2. Frisi (Paolo) et Melander (Daniel): De theoria lunæ commentarii. 4to. Parmæ, 1769 Frisius, see Gemma Frisius. Fritz (Hermann): — : Verzeichniss beobachteter Polarlichter. 4to. Wien, 1873 —: Das Polarlicht. 8vo. Leipzig, 1881 - : Die Perioden der Sonnenflecken, des Polarlichtes und des 4to. Erdmagnetismus. Frodsham (Charles): A few remarks upon the construction and principles of action of the aneroid barometer. 8vo. London, 1849 Fromondus (Libertus): ---: Vesta, sive ant-Aristarchi vindex, aduersus Iac. Lansbergium Philippi F. Medicum Middelburgensem. 4to. Antverpiæ, 1634 - : De Cometa, see Fienus; De motu Terræ, see Lansberg.

Frost	(G.	82	W.	):
-------	-----	----	----	----

Companion to the mental astronomer; or an easy guide to a complete knowledge of the constellations.

4to. Hackney, 1829

# Fuchs (Johann Nep.):

\*Ueber die Theorien der Erde.

4to. München, 1838

#### Fuss (Paul Henri):

- ----: \*Über Leonhardi Euleri commentationes arithmeticae collectae. 8vo. St. Pétersbourg, 1848
- ---: Eloge de, see Struve (O.)

### Fuss (V.):

\*Beobachtungen und Untersuchungen über die astronomische Strahlenbrechung in der Nähe des Horizontes.

4to. St. Pétersbourg, 1872

### Fuss (V.) und Magnus Nyrén:

\*Bestimmung der Längen-Differenz zwischen den Sternwarten Stockholm und Helsingfors. 4to. St. Pétersbourg, 1871

## Gabriele (Giacomo):

Dialogo . . . . nel quale de la sphera, et de gli orti et occasi de le stelle minutamente si ragiona. 4to. Vinetia, 1545

#### Gadbury (John):

——: Coelestis legatus; or the coelestial ambassadour, astrologically predicting the grand catastrophe that is probable to befall most of the kingdomes and countries of Europe.

to. London, 1656

Ephemerides of the celestial motions for X years, beginning anno 1672 (where the industrious Mr. Wing's expired) and ending an. 1681.

4to. London, 1672

---: Ephemerides of the celestial motions and aspects, eclipses of the luminaries, &c., for XX years, beginning anno 1682 and ending an. 1701.

4to. London, 1680

# Gaffarel (Jacques):

Vnheard-of curiosities, concerning the talismanical sculpture of the Persians, the horoscope of the patriarkes, and the reading of the stars . . . Englished by Edmund Chilmead.

8vo. London, 1650

#### Galbraith (William):

----: Mathematical and astronomical tables for the use of students of mathematics, practical astronomers, surveyors, engineers and navigators.

Svo. Edinburgh, 1827

----: Barometric Tables, for the use of engineers, geologists, and scientific travellers. 8vo. Edinburgh, 1833

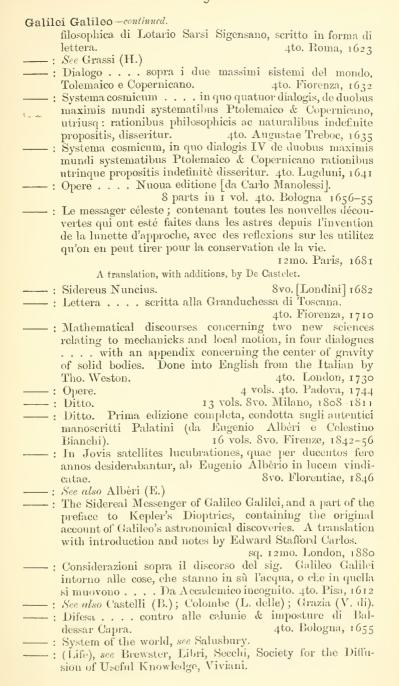
-----: Trigonometrical surveying, levelling, and railway engineering. 8vo. Edinburgh, 1842

#### Galilei (Galileo):

: Istoria e dimostrazioni intorno alle macchie solari e loro accidenti, comprese in tre lettere scritte all'illustrissimo signor Marco Velseri.

4to. Roma, 1613

---: Il saggiatore, nel quale con bilancia esquisita e giusta si ponderano le cose contenute nella libra astronomica e



				4.0	- 7
Galil	<b>A1</b> G	halil	<b>eo</b> -co	ntinue	ia.

——: (Trial), see Chasles, Gebler, Gherardi, Plana, Wohlwill, Wolynski.

Galle (Andreas):

Zur Berechnung der Proximitäten von Asteroiden-Bahnen. Inaugural-Dissertation. 8vo. Breslau, 1883

#### Galle (Johann Gottfried):

----: Ueber die Verbesserung der Planeten-Elemente aus beobachteten Oppositionen, angewandt auf eine neue Bestimmung der Pallas-Bahn. [Habilitations-Schrift.] 4to. Breslau, 1858

: Dr. Wilhelm Olbers' Abhandlung über die leichteste und bequemste Methode die Bahn eines Cometen zu berechnen.

- Nachtrag zu der zweiten Auflage. 8vo. Leipzig, 1864

  \*Ueber die Bahn des am 30. Januar 1868 beobachteten
  und . . . . als Steinregen niedergefallenen Meteors durch
  die Atmosphäre. 8vo. Breslau, 1868
- : Ueber eine Bestimmung der Sonnen-Parallaxe aus correspondirenden Beobachtungen des Planeten Flora auf mehreren Sternwarten der nördlichen und südlichen Halbkugel im October und November 1873. 8vo. Breslau, 1875

# Gallo (Giuseppe):

Introduzione alla meccanica, ed alla filosofia della natura.
2 vols. 8vo. Torino, 1855-1860

#### Galloway (Thomas):

- : \*A treatise on Astronomy, theoretical, physical and practical, from the Encyclopædia Britannica. 7th edition.

  4to. Edinburgh, 1831
- ---: \*Trigonometrical survey. [Encycl. Brit. 7th edition.] 4to.
  ---: \*Figure of the Earth. [Encycl. Brit. 7th edition.] 4to.
- \*\*A treatise on probability, forming an article under that head in the seventh edition of the Encyclopædia Britannica.

  8vo. Edinburgh, 1839
- —: \*Memoir of Thomas Henderson. Svo. London, 1845

#### Gallucci (Giovanni Paolo):

- —— : Della fabrica & uso del novo Horologio universale ad ogni latitudine. 4to. Venetia, 1590
- : Speculum Vranicvm; in quo vera loca tum octauæ sphæræ, tum septem Planetarum mira facilitate ad quodlibet datum tempus ex prutenicarum ratione colliguntur.

fol. Venetijs, 1593

# Gamaches (Étienne Simon de):

Astronomie physique, ou principes généraux de la nature, appliqués au mécanisme astronomique, et comparés aux principes de la philosophie de M. Newton. 4to. Paris, 1740

#### Garcæus (Johannes):

Primus Tractatus brevis et utilis de tempore, conscriptus in gratiam studiosorum. 8vo. Vitebergæ, 1563

Garcœus (Johannes)—continued.
: Secundus Tractatus de tempore, sive de ortu et occasu
stellarum fixarum ad quodlibet temporis momentum.
8vo. Witebergæ, 1565 ——: Tertius Tractatus, de usu globi astriferi.
8vo. Vitebergæ, 1565
: Astrologiae methodus in qua secundum doctrinam Ptolemei, exactissima facillimaque Genituras qualescunque iudicandi ratio traditur (accessit E. O. Schreckenfuchsii Dia-
logus de septem Calendariis). 2 vols. in 1, fol. Basileæ, 1576
Gardiner (Wm.) et François Callet:  Tables portatives de logarithmes, publiées à Londres par Gardiner, augmentées, et perfectionnées dans leur disposition par M. Callet.  12mo. Paris, 1783
Garnier (J. G.):
: Élémens d'algèbre à l'usage des aspirans à l'École Polytechnique. Première section. Troisième Edition.
8vo. Paris, 1811: Leçons de calcul intégral Troisième édition.
8vo. Paris, 1812 : Analyse algébrique, faisant suite à la première section de
l'algèbre. Deuxième édition. 8vo. Paris, 1814
: Élémens de géométrie analytique. Svo. Paris, 1808
— : Leçons de statique, à l'usage des aspirans à l'École Impériale Polytechnique. 8vo. Paris, 1811
Réciproques de la géométrie, suivies d'un recueil de théorèmes et de problèmes. Seconde édition. Svo. Paris, 1810
Garrard (William):
Copious trigonometrical tables, shewing the results in all cases of plane trigonometry, by inspection. Intended to complete the requisite tables to the Nautical Almanack.  8vo. London, 1589
Garthe (C.):
: Foucault's Versuch als direkter Beweis der Achsendrehung
der Erde, angestellt im Dom zu Köln. 8vo. Köln, 1852  : Die Absidenscheibe. Beschreibung eines Apparates durch
welchen die Lage der Absidenlinie der Erdbahn und deren
Veränderlichkeit im Weltenraume erörtert werden kann. 8vo. Köln, 1871
Gasparis (Annibale de):
*Sui rapporti delle variazioni simultanee di alcuni elementi di ellissi instantanee nel problema dei tre corpi.
4to. Napoli, 1880
Gassendi (Pierre): : Novem stellæ circa Jovem visæ Accessit observatio
geminatæ in singulos dies (æstus maris instar) reciproca-
tionis perpendiculorum. 4to. Parisiis, 1643
— : Tychonis Brahei Equitis Dani, astronomorum Coryphæi
vita Accessit Nicolai Copernici, Georgii Peurbachii, & Joannis Regiomontani astronomorum celebrium vita.
4to. Parisiis, 1654

Gassendi (Pierre)—continued.
— : Institutio astronomica juxta hypotheses tam veterum quam Copernici & Tychonis Accedunt ejusdem varij trac- tatus astronomici. Editio ultima. 4to. Hagæ-Comitum, 1656
— : Institutio astronomica, juxta hypotheseis tam veterum quam recentiorum. Cui accesserunt Galilei Galilei Nun-
quam recentiorum. Cui accesserunt Galilei Galilei Nun-
cius Sidereus et Johannis Kepleri Dioptrice. Tertia editio.
3 parts in 1 vol. 8vo. Londini, 1683 (1682)
: The vanity of judiciary astrology, or divination by the
stars. 8vo. London, 1659
Gauss (Carl Friedrich):
— : Disquisitiones arithmeticae. 8vo. Lipsiae, 1801
—: Recherches arithmétiques traduites par A. C. M.
Poullet-Delisle. 4to. Paris, 1807
: Theoria motus corporum coelestium in sectionibus conicis
Solem ambientium. 4to. Hamburgi, 1809
- : Théorie du mouvement des corps célestes parcourant des
sections coniques autour du Soleil; traduction du 'Theoria
motus' de Gauss, suivie de notes, par Edmond Dubois.
8vo. Paris, n.d.
: Theorie der Bewegung der Himmelskörper welche in
Kegelschnitten die Sonne umlaufen Ins Deutsche
iibertragen von Carl Haase. 4to. Hannover, 1865
iibertragen von Carl Haase. 4to. Hannover, 1865
: *Disquisitio de elementis ellipticis Palladis ex oppositionibus
annorum 1803–1809. 4to. Gottingae, 1811
: *Observationes cometae secundi A. 1813 in Observatorio
Gottingensi factae; adjectis nonnullis adnotationibus circa
calculum orbitarum parabolicarum. 4to. Gottingae, 1813
: Determinatio attractionis, quam in punctum quodvis posi-
tionis datae exerceret planeta, si ejus massa per totam
orbitam, ratione temporis, quo singulae partes describun-
tur, uniformiter esset dispertita. 4to. Gottingae, 1818
: Theorematis fundamentalis in doctrina de residuis quadra-
ticis demonstrationes, et ampliationes novae.
4to. Gottingae, 1818
: *Theoria combinationis observationum erroribus minimis
obnoxiae. 4to. Gottingae, 1823
—: Theoria residuorum biquadraticorum Commentatio
Secunda. 4to. Gottingae, 1832
: Werke. Herausgegeben von der K. Gesellschaft der Wis-
senschaften zu Göttingen. 7 vols. 4to. Göttingen, 1870-77
Band 1. Disquisitiones arithmeticæ.
2. Höhere Arithmetik.
3. Analysis.
4. Wahrscheinlichkeits-Rechnung und Geometrie.
5. Mathematische Physik.
6. Astronomische Abhandlungen.
7. Theoria motus corporum cœlestium.
: Life, see Winnecke.
Gauss (Carl Friedrich) und Friedrich Wilhelm Bessel:
Briefwechsel Herausgegeben auf Veranlassung der
königlich-preussischen Akademie der Wissenschaften.
8 vo. Leipzig, 1880

Gauss (Carl Friedrich) und Heinrich Christian Schumacher;
Briefwechsel Herausgegeben von C. A. F. Peters. 6 vols. 8vo. Altona, 1860-65
Gautier (Alfred):
: Essai historique sur le problème des trois corps, ou disserta- tion sur la théorie des mouvemens de la lune et des pla- nètes. 4to. Paris, 1817
-: *Note sur quelques observations astronomiques faites en 1821 et 1822 à l'observatoire de Genève. 4to. Genève, 1822
: *Mémoire sur une nouvelle détermination de la longitude de Genève. 4to. Genève, 1824
: *Coup-d'œil sur l'état actuel de l'astronomie pratique en France et en Angleterre. 8vo. Genève, 1825
: *Mémoire sur une nouvelle détermination de la latitude de Genève. 4to. Genève, 1830
: *Sur les Bolides qui ont paru le 19 Août 1847 et le 11 Février 1850. Svo. Genève, 1850
: *Notice biographique sur M. le Baron Maurice.  8vo. Genève, 1851
: *Notice sur les derniers travaux d'observation relatifs aux Anneaux de Saturne. 8vo. Genève, 1856
: Sur quelques applications récentes de la photographie à l'astronomie. 8vo. Genève 1858
: *Sur les travaux récents des géomètres et des astronomes
relatifs à la théorie des mouvements de la lune. 8vo. Genève, 1859
: *Louis François Wartmann. 8vo. Genève, 1864 : *Notice sur les observations météorologiques faites sur la côte du Labrador par des missionnaires Moraves.
8vo. Genève, 1870
: *Observations thermométriques récentes faites dans quel- ques stations de Syrie et de Palestine. 8vo. Genève, 1870
: [Reviews of various astronomical works, from the Biblio- thèque Universelle, &c.] 8vo. Genève, v.d.
Gautier (Emile): : *Observation de l'éclipse totale du soleil du 18 Juillet 1860
à Tarazona. 8vo. Genève, 1860
: Notice historique et descriptive sur l'Observatoire de Genève. 8vo. Genève. 1883
Geber (Filius Affla Hispalensis): Libri IX de Astronomia, see Apianus, Instrumentum Primi Mobilis.
Gebler (Karl von):
Galileo Galilei and the Roman Curia, from authentic sources Translated, with the sanction of the author, by Mrs. G. Sturge.  8vo. London, 1879
Geiser (C. F.):  Beiträge zur synthetischen Geometrie.  8vo. Zürich, 1866
Gell (Robert):
Stella nova, a new starre leading wisemen unto Christ. 4to. London, 1649

К

Gelpke (August Heinrich Christian):
: Neue Ansicht über den merkwürdigen Naturbau der Kome-
ten und besonders derjenigen von 1811 und 1819; wie
auch über die Beschaffenheit ihrer Bahnen, und die einstige Zerstörungsart unseres Wohnortes von denselben. Zweite
Ausgabe. 8vo. Leipzig, 1820
—: Neue Ansicht über den merkwürdigen Naturbau der
Kometen und die Beschaffenheit ihrer Bahnen, wie auch
über die einstige Zerstörungsart unseres Wohnortes von
denselben. Dritte Ausgabe. Svo. Leipzig, 1829: Ueber die schrecklichen Wirkungen des Aufsturzes eines
Kometen auf die Erde und über die vor fünftausend Jahren
gehabte Erscheinung dieser Art. 8vo. Leipzig, 1835
- : Über die Entstehungsart und Beschaffenheit der Kometen,
wie auch über die Bahn und den Lauf des Halley'schen
Kometen für das Jahr 1835. 8vo. Braunschweig, 1835 —: Populaire Himmelskunde oder allgemein fassliche Betrach-
tungen über die grossen Wunderwerke des Weltalls
Fünfte Ausgabe. 8vo. Hannover, 1837
Geminus:
- : Γεμίτου Εἰσαγωγὴ εἰς τὰ Φαιτόμετα. Gemini Elementa
Astronomiæ, Græcè & Latinè, interprete Edone Hilderico.
8vo. Altorphii, 1590
: Isagoge ad Arati Phænomena, see Petavius.
Gemma Frisius (Reinier):
— : De Radio Astronomico & Geometrico liber. In quo multa que ad Geographia, Opticam, Geometriam & Astronomiam
vtiliss. sunt, demonstrantur. 4to. Antuerpiæ, 1545
: De Astrolabo Catholico, liber quo latissime patentis Instru-
menti multiplex vsus explicatur, & quicquid vspiam rerum
Mathematicarū tradi possit continetur.
8vo. Antuerpiæ, 1556 ——: De principijs Astronomiæ & Cosmographiæ, deque vsu globi
ab codem editi: Item De Orbis diuisione, & Insulis, rebusque
nuper inuentis. 8vo. Coloniæ, 1578
: Cosmographia, see Apianus et Gemma Frisius.
Geneva, Observatoire:
: Observations Astronomiques faites dans les années
1841-58, par E. Plantamour. 4to. Genève, 1842-61  —: Résultats des observations magnétiques dans les
années 1842 et 1843. 4to. Genève, 1844
: Résumé des observations thermométriques et barométriques
faites à l'Observatoire de Genève et au Grand StBernard
1841–50. 4to. Genève, 1851 ——: *Résumé Météorologique pour Genève et le Grand
St. Bernard, par E. Plantamour (et A. Kammermann),
1847–48, 1850–77, 79–82. Svo. Genève, 1848–83
— : *Nouvelle organisation des observations météorologiques à
Genève, au Grand Saint-Bernard, & à Martigny. Observa-
tions météorologiques pendant le mois de Décembre
1883. Svo. Genève, 1884

Geneva, Société de Physique et d'Histoire Naturelle:

---: Mémoires. Tome 5-28, Part 1. 4to. Genève, 1832-83

— : Table des mémoires contenus dans les tomes 1-20.

4to. Genève, 1871

— : Rapport du Président (A. de Candolle) pour la période annuelle 1873-74. 4to. Genève

Gentleman's Diary, or mathematical repository, 1741-77, and 1782-1813. 7 vols. 12mo. 1741-1813

Gentleman's Mathematical Companion, 1798-1827.

7 vols. 12mo. London, 1797-1827

The title of the first vol. is 'Companion to the Gentleman's diary.'

Geography and Astronomy:

An introduction to geography and astronomy: containing chiefly The Description and Use of the Terrestrial and Celestial Globes . . . . The second edition.

8vo. London, 1735

George (Christopher):

\*Description of an improved double sextant.

Svo. London, 1867

Georgetown College, District of Columbia:

— : Astronomical Observatory, Annals. No. 1.

4to. New York, 1852

- : Observations of solar spots, see Sestini (B.).

Georgetown, Demerara, Observatory:

Monthly Tables of daily means of meteorological elements, deduced from observations taken . . . . during eleven years, commencing January 1846 . . . . by Patrick Sandeman.

4to. Greenock, 1857

Gergonne (J. D.):

Annales de mathématiques pures et appliquées : recueil périodique. Tomes 21, 22. 4to. Nismes, 1830-32

Gerling (Christ. Ludwig):

Beiträge zur Geographie Kurhessens und der umliegenden Gegenden, vermittelst der kurhessichen Triangulirung vom Jahr 1823. 8vo. Cassel, 1831-39

Germain (A.):

Traité des projections des cartes géographiques, représentation plane de la sphère et du sphéroïde. Svo. Paris, n.d.

Germanieus, Phænomena, see Aratus.

Germar (F. H.):

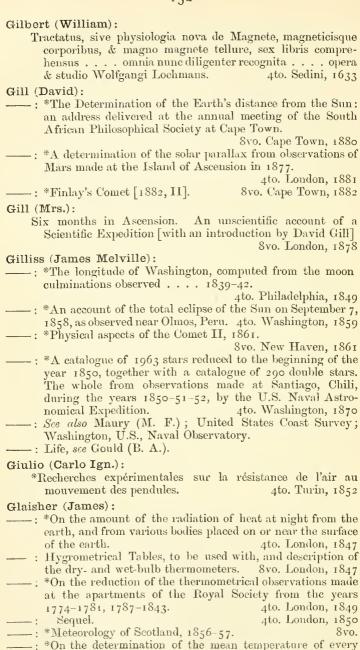
Seehs Tafeln zur Erleichterung der Himmelskunde, für die Liebhaber derselben (with portfolio of plates).

Svo. Leipzig, 1846

Gherardi (Silvestro):

— : \*Il processo Galileo riveduto sopra documenti di nuova fonte. Svo. Firenze, 1870

---: \*Sulla dissertazione del dott. Emilio Wohlwill. Il processo di Galileo Galilei : ragguaglio. Svo. Firenze, 1872



day in the year from . . . . observations taken at the Royal Observatory, Greenwich, 1814-56. Svo. London, 1858

Glaisher (James)—continued.
: *On the meteorological and physical effects of the Solar
Eclipse of March 15, 1858. Svo. London, 1858
-: *An account of meteorological and physical observations
made in five balloon ascents in the year 1863.
8vo. London, 1863
: *An account of meteorological and physical observations
made in nine balloon ascents in the years 1863 and 1864.
8vo. London.
- : Scientific experiments in balloons. 8vo. London, 1863
—: Meteorology of England, 1863-84. 8vo. London. —: Reduction of the meteorological observations made at the
Royal Horticultural Gardens, Chiswick, in the years 1826–
69. 8vo. London, 1871
: See also Guillemin (A.); Mitchel (O. M.).
Glaisher (J. W. L.):
*Report of the Committee [of the British Association] on
mathematical tables. Svo. London, 1873
Glasgow Astronomical Society (report of the nature and pro-
gress of the), drawn up by order of the directors.
8vo. Glasgow, 1809
Glasgow, Mitchell Library:
Report, 1881–83. Svo. Glasgow.
Glasgow Observatory:
: Report of the proceedings at the dinner of the friends of
astronomical science, held in the Town Hall on Friday,
December 16. 8vo. Glasgow, 1836
-: Report of the Professor of Astronomy in the University of
Glasgow, 1864–68 and 1871. Svo. Glasgow.
-: Catalogue of 6415 stars, for the epoch 1870, deduced from
observations made during the years 1860 to 1881,
preceded by a synopsis of the annual results of each star
arranged in the order of Right Ascension. By Robert Grant.  4to, Glasgow, 1883
Glasgow Philosophical Society:
Proceedings, 1841-83. Vol. 1-14. 8vo. Glasgow, 1844-83
Glasgow University:
Statement by the Committee on time-signals, in refer-
ence to a report addressed on the 14th of October, 1863, by
Professor Piazzi Smyth to the Board of Visitors of the
Edinburgh Observatory. Svo. Glasgow, 1863
Gledhill (Joseph):
Handbook of Double Stars, see Crossley and Gledhill.
Gloriosus (Joannes Camillus):
—: De Cometis dissertatio Astronomico-Physica.
4to. Venetiis, 1624
: Responsio ad controversias de Cometis peripateticas,
seu potius ad calumnias & mendacia cuiusdam peripatetici.
4to. Venetiis, 1626
Gnomonic Projection of the Sphere. 8vo. London, 1851



Astro-meteorologica, or aphorisms and discourses of the Bodies Cœlestial, their natures and influences. fol. London, 1686

Godfray (Hugh):

— : A treatise on astronomy for the use of colleges and schools.

8vo. Cambridge, 1866

- : An elementary treatise on the lunar theory, with a brief sketch of the history of the problem before Newton . . . Third edition. 8vo. Cambridge, 1871

Godward (William):

Auxiliary tables for computing an approximate Ephemeris of a Minor Planet where the angle of excentricity does not exceed twenty degrees. 4to. London, 1866

Gogou (Constantin), see Paris, Observatoire.

Goldbach (C. F.):

Neuester Himmels-Atlas zum Gebrauche für Schul- und Akademischen Unterricht . . . Revidirt auf der Sternwarte Seeberg bey Gotha, und mit einer Einleitung begleitet vom Hrn. Obristwachtmstr. von Zach.

Obl. fol. Weimar, 1799

Goldbach (Joachim):

Dissertatio Selenographica. [Inaugural dissertation.]
4to. Regiomonti, 1662

Goldingham (John):

— : Report of the length of the pendulum at the Equator from experiments and observations made on an expedition in 1821; together with a deduction of the figure of the Earth.

fol. Madras, 1824

---: See also Madras Observatory.

Gompertz (Benjamin):

—— : \*On pendulums vibrating between cheeks. Svo. London, 1817—— : The principles and application of imaginary quantities.

4to. London, 1820

---: Hints on Porisms . . . . being No. 3 of Original Tracts.

4to. London, 1850

----: Life, see Adler (M. N.).

Good (John):

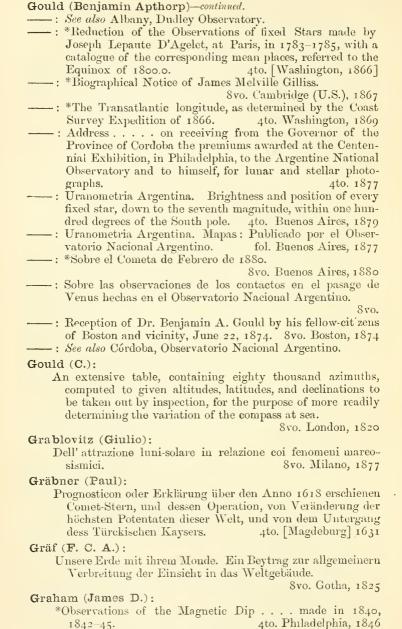
The art of shadows, or universal dialling, with tables exactly calculated for the lat. of 51 deg. 30 min. viz.: London. Third edition.

8vo. London, 1731

Goodacre (Robert):

A glossary; or explanation of the principal terms used in the Sciences of Astronomy and Geography, with a description of the principal stars and constellations of the heavens . . . . Fifth edition. 12mo. Nottingham, 1828

## Gordon (Edward Smith): \*On fixing positions by the more simple astronomical obser-8vo. Woolwich, 1881 Gore (John Ellard): Southern stellar objects for small telescopes, between the equator and 55° south declination, with observations made in the Punjab. Svo. Lodiana, 1877 Gotha Observatory, see Ball (L. de); Hansen (P. A.); Zach (F. X. von), Gothard (Alexander von): \*Adatok Jupiter és Mars Bolygók physikájához. Svo, Budapest, 1884 Gothard (Eugen von): ---: \*Ein Spektroscop für Kometen- und Fixstern-Beobach-4to. Leipzig, 1883 tungen. --: \*Egy új Spektroscop. 8vo. Budapest, 1884 ---: See Herény, Observatorium. Göttingen, Königliehe Gesellschaft der Wissenschaften: ---: Commentarii Societatis Regiae Scientiarum Gottingensis, 4 vols. 4to. Gottingae, 1752-55 - : Novi Commentarii Societatis Regiae Scientiarum Gottingensis, 1769-77. 8 vols. 4to. Gottingae, 1771-78 — : Commentationes Societatis Regiae Scientiarum Gottingensis Recentiores, 1823-27. Vol. 6. 4to. Gottingae, 1828 ——: Abhandlungen, 1838–83. Band 1–22, 24–30. 4to. Göttingen, 1843-83 - : Göttingische Gelehrte Anzeigen, 1858-83. 12mo. Göttingen, 1858-83 ---: Nachrichten von der k. Gesellschaft der Wissenschaften und der Georg-Augusts-Universität, 1853-83. 12mo. Göttingen, 1853-83 Göttingen (Königl. Sternwarte): --: Astronomische Mittheilungen. Erster Theil: Mittlere Oerter der in den Zonen -o° und -1° der Bonner Durchmusterung enthaltenen Sterne bis zu q<sup>m</sup>o Grösse beobachtet und auf 1875.0 reducirt, von R. Copeland und C. Börgen. 4to. Göttingen, 1869 — : Veröffentlichungen . . . . 1. Theorie des Bifilar-Hygrometers. 2. Ueber Fixsternsysteme. 3. Ueber einen grossen Sternschnuppenfall aus dem Jahre 524, von W. Klinkerfues. 4. Zeichnungen des Planeten Mars, von O. Boeddicker. 8vo. Göttingen, 1878 ---: See also Mayer (T.) Gould (Benjamin Apthorp): — : Untersuchungen über die gegenseitige Lage der Bahnen der zwischen Mars und Jupiter sich bewegenden Planeten. Inaugural-Dissertation. 4to. Göttingen, 1848 ---: The Astronomical Journal. Vol. 1 6. 4to. Cambridge and Albany, 1851-61 ---: Reply to the 'Statement of the Trustees' of the Dudley Svo. Albany, 1859 Observatory.



Grandsagne (Ajasson de): Uranographie ou description du ciel, renfermant un abrégé

Grandsagne (Ajasson de)-continued.
de géographie mathématique et un traité du calendrier
suivi d'un article sur les étoiles doubles par M.
Arago. 12mo. Paris, 1834
Grant (Robert):
: History of Physical Astronomy, from the earliest ages to the
middle of the nineteenth century. 8vo. London, 1852
: Two letters on the question of the authenticity of the
documents respecting Newton, which have been communi-
cated by M. Chasles to the Academy of Sciences of the French Institute.  Svo. Glasgow, 1869
-—: Catalogue of 6415 stars, see Glasgow Observatory.
[Grassi (Horatius)]:
Libra astronomica ac philosophica qua Galilaei Galilaei
opiniones de cometis a Mario Guiducio in Florentina Aca-
demia expositæ, atque in lucem nuper editæ, examinantur.
4to. Perusiæ, 1619
Published under the name of Lotario Sarsi.
Gravesande (Guill. Jac. 's):
—: Physices elementa mathematica experimentis confirmata, sive introductio ad philosophiam Newtonianam. Vol. 2.
4to. Lugduni Batavorum, 1721
-: Mathematical elements of natural philosophy confirm'd by
experiments; or an introduction to Sir Isaac Newton's
philosophy Translated by J. T. Desaguliers
The fifth edition. 2 vols. 8vo. London, 1737
: The elements of universal mathematics, or algebra; to
which is added a specimen of a commentary on Sir Isaac
Newton's Universal Arithmetic Second edition. 8vo. London, 1752
Gravitation:
—: Thoughts on general gravitation, and views thence arising
as to the state of the Universe. 4to. London, 1777
: An exposition of the nature, force, action, and other pro-
perties of gravitation on the planets Svo. London, 1842
Gravius (Johannes):
: Elementa linguæ Persicæ Item Anonymus Persa de
Siglis Arabum et Persarum Astronomicis.
4to. Londini, 1649
—: See also Ulugh Beigh.
Gray (Peter):  —: On a practical method of forming logarithms and anti-
logarithms to twelve or any less number of places.
8vo. London, 1847
: A table for the easy formation of anti-logarithms of twelve
or any less number of places. Svo. London, 1848
-: Tables and formulæ for the computation of life contin-
gencies; with copious examples of annuity, assurance, and
friendly society calculations. : Addendum.  8vo. London, 1849 8vo. London, 1870
. Addengtum.
: *Remarks on a problem in life contingencies.

Gray (Peter)-continued.

---: Tables for the formation of logarithms & anti-logarithms to twelve places; with explanatory introduction.

Svo. London, 1865

---: On the arithmometer of M. Thomas (De Colmar), and its application to the construction of life contingency tables.

8vo. London, 1874

---: Tables for the formation of logarithms & anti-logarithms to twenty-four or any less number of places, with explanatory introduction and historical preface. 8vo. London, 1876

Gray (Peter), Henry Ambrose Smith, & William Orchard: Assurance and annuity tables, according to the Carlisle rate of mortality at three per cent. 8vo. London, 1851

Grazia (Vincenzio di):

Considerazioni . . . . sopra a'l discorso di Galileo Galilei intorno alle cose che stanno su l'acqua, e che in quella si 4to. Firenze, 1613 muoyono.

Greaves (John):

The origine and antiquity of our English weights and measures discover'd, by their near agreement with such standards that are now found in one of the Egyptian pyramides.

8vo. London, 1706

Grebel (M. W.):

Die Strahlenbrechung in einaxigen Mitteln, graphisch dargestellt. (Programm des K. Gymnasiums zu Glogau.) 4to. Glogau, 1842

Green (F. M.):

Report on the telegraphic determination of differences of longitudes in the West Indies and Central America. 4to. Washington, 1877

Green (F. M.), C. H. Davis, and J. A. Norris:

—: Telegraphic determination of longitudes on the East Coast of South America, embracing the meridians of Lisbon, Ma-4to. Washington, 1880 deira [&c.]

---: Telegraphic determination of longitudes in Japan, China, and 4to. Washington, 1883 the East Indies.

Green (F. M.) and E. S. Holden:

The determination of secondary meridians by electric telegraph, and the personal equation. 4to. Washington, 1876

Green (George):

\*Mathematical investigations concerning the laws of the equilibrium of fluids analogous to the electric fluid, with 4to. Cambridge, 1835 other similar researches.

Green (Jacob):

Astronomical Recreations; or sketches of the relative position and mythological history of the constellations.

fol. Philadelphia, 1824

Green (Nathaniel E.):

\*Observations of Mars at Madeira, August and September, 4to, London, 1879 1877.

## Greene (Robert):

The principles of the philosophy of the expansive and contractive forces, or an inquiry into the principles of the modern philosophy . . . . In seven books.

fol. Cambridge, 1727

# Greenwich, Royal Observatory:

- : Historiæ cælestis libri duo, quorum prior exhibet catalogum stellarum fixarum Britannicum novum et locupletissimum, una cum earundem planetarumque omnium observationibus sextante, micrometro, &c., habitis: Posterior transitus syderum per planum arcus meridionalis, et distantias corum a vertice complectitur. Observante Johanne Flamsteedio, 1676–1705.
- : Historiae Celestis Britannicae volumen primum (secundum et tertium) . . . observante Joanne Flamsteedio, 1675–1720. 3 vols. fol. Londini, 1725
- : Astronomical observations made . . . . from the year 1750 to the year 1762, by the Rev. James Bradley, Astronomer Royal, together with a continuation of the same [to 1764] by the Rev. Nathaniel Bliss, Astronomer Royal.
- 2 vols. fol. Oxford, 1798–1805

  --- : Astronomical observations made . . . . from the year 1765 to the year 1810, by the Rev. Nevil Maskelyne, Astronomer Royal. 4 vols. London, 1776–1811
- ----: Astronomical observations made . . . . in the years 1811-1835, by John Pond, Astronomer Royal.
- : A Catalogue of 1112 stars, reduced from Observations made . . . from the years 1816 to 1833 [under the direction of John Pond].
- : The sum of the three equations of aberration, solar nutation, and precession of forty principal fixed stars for every day of the year, in leap year, the first, the second, and third years after (1824–39). [J. Pond.] fol. London.
- : Tables of the aberration, annual variation, solar and lunar nutation in N.P.D. for 40 principal fixed stars for every day of the year 1825. [J. Pond.] fol. London.
- : Experiments made to determine whether any permanent difference exist between the two Mural Circles.
- 8vo. London, 1825

  ---: Astronomical Observations made . . . . in the years 18361847, under the direction of G. B. Airy.
- 12 vols. 4to. London, 1837-49

  ——: Magnetical and meterological observations made . . . in
- the years 1840-47, under the direction of G. B. Airy.
  7 vols. 4to. London, 1843-49

  : Astronomical and magnetical and meteorological observa-
- tions made . . . in the years 1848-81 under the direction of G. B. Airy.

  34 vols. 4to, London, 1850-83
- ---: Appendices.

# Greenwich, Royal Observatory-continued.

- ---: Appendices-continued.
  - 1836. II. Table of factors for converting errors of R.A. and N.P.D. into errors of longitude and ecliptic P.D.
  - 1837. III. Logarithms of sines and cosines to time for every 10 seconds through the 24 hours.
    - IV. Tables for converting sidereal time into mean solar time.
  - 1842. Catalogue of the places of 1439 stars referred to Jan. 1, 1840, from observations 1836-41.
  - 1845. Determination of the longitude of Valentia by transmission of chronometers.
  - 1847. Catalogue of 2156 stars from the observations made 1836-47.
  - 1851. Results in R.A. of observations of stars by Dr. Maskelyne 1765–1807, arranged by R. Main.
  - 1852. I. Description of the Transit Circle.
    - II. Regulations of the Royal Observatory.
  - 1853. Bessel's Refraction Tables, modified and expanded.
  - 1854. I. Description of the Reflex Zenith Tube.
    - Catalogue of 1576 stars from observations 1848-53, reduced to 1850.
  - 1856. Description of the Galvanic Chronographic Apparatus.
  - 1862. I. Seven-year catalogue of 2022 stars from observations 1854-60, reduced to 1860.
    - II. Plan of Buildings and grounds.
  - 1864. I. On the value of the Moon's semidiameter from the occultations observed at Cambridge and Greenwich. (H. Breen.)
    - II. Reduction of the Greenwich planetary observations 1831-35.
  - 1867. I. Description of the Altazimuth.
    - II. Description of the Transit Circle.
  - 1868. I. Corrections of Bouvard's elements of the orbits of Jupiter and Saturn, by H. Breen.
    - II. New seven-year catalogue of 2760 stars, from observations 1861-67, reduced to 1864.
    - III. Description of the Great Equatoreal.
  - 1873. Regulations of the Royal Observatory.
  - 1875. Numerical lunar theory.
  - 1876. Nine-year catalogue of 2263 stars, from observations from 1868-76, reduced to 1872.
  - 1877. Mean temperature of the Air at every hour of the day from 1849 to 1868.
  - 1879. Description of the Greenwich time signal system.
  - Results of Astronomical Observations, 1847-81.
  - Results of magnetical and meteorological observations, 1848-81.
  - Results of spectroscopic and photographic observations, 1878-81.
  - Reports of the Astronomer Royal to the Board of Visitors, 1836-84.
- ----: Reduction of the observations of the Moon made . . . . from 1750 to 1830, computed . . . . under the superintendence of G. B. Airy. 2 vols. 4to. London, 1848
- ---: (Continuation) from 1831 to 1851. 4to. London, 1859
- ---: Reduction of the observations of planets made . . . . from

Greenwich, Royal Observatory-continued.

1750 to 1830, computed . . . . under the superintendence of G. B. Airy.

4to. London, 1845

: Reduction of twenty years' photographic records of the burometer, and dry-bulb and wet-bulb thermometers, and of twenty-seven years' observations of the earth thermometers, made . . . . under the direction of G. B. Airy.

4to. London, 1878

## Greenwood (Nicholas):

Astronomia Anglicana: containing an absolute and entire piece of astronomy. Wherein is succinctly handled the trigonometrical part, generally propounded and particularly apply'd in all questions tending to diurnal metion . . . with new, facile, and most exact tables . . . fol. London, 1689

Grégoire ( - ):

Rapport sur l'établissement du Bureau des Longitudes.

8vo. Paris, An III [1795]

Gregorie (John):

The description and use of the terrestrial globe (description and use of maps and charts).

4to. London, 1649

Gregorius, Bishop of Tours:

Liber ineditus de Cursu Stellarum; ratio qualiter ad officium implendum debeat observari, sive de cursibus ecclesiasticis. Nunc primum edidit, recensuit, vindicavit Frid. Haase.

4to. Vratislaviae, 1853

## Gregory (David):

— : Astronomiæ physicæ & geometricæ elementa.

fol. Oxoniæ, 1702

- : Astronomiæ physicæ & geometricæ elementa. Secunda editio; accesserunt præfatio editoris (C. Huart); cometographia Halleiana; Horologiorum Sciotericorum tractatus [a C. Huart]. 2 vols. 4to. Genevæ, 1726

The elements of physical and geometrical astronomy, done into English. Second edition, to which is annex'd Dr. Halley's synopsis of the astronomy of comets. The whole newly revised . . . . by Edmund Stone.

2 vols. Svo. London, 1726

— : Catoptrice et dioptrice spherice elementa.

Svo. Edinburgi, 1713

— : Elements of catoptrics and dioptrics. Translated from the Latin original, with a large supplement, by William Browne. The second edition, to which is added an appendix by J. T. Desaguliers.

8vo. London, 1735

Gregory (G.):

The economy of nature explained and illustrated on the principles of modern philosophy. 3 vols. 8vo. London, 1796

Gregory (Olinthus):

: A treatise on astronomy, in which the elements of the science are deduced in a natural order, from the appearances of the heavens to an observer on the earth . . . .

Svo. London, 1802

142
Gregory (Olinthus)—continued. ——: Elements of plane and spherical trigonometry.  12mo. London, 1816
: *An account of some experiments made in order to determine the velocity with which sound is transmitted in the atmosphere. 4to. Cambridge, 1824: Mathematics for practical men; being a common-place book of principles, theorems, rules, and tables.  8vo. London, 1825
Gregory (Clinthus) [and others]:  Dissertations and letters by Don Joseph Rodriguez, the Chevalier Delambre, Baron de Zach, Dr. Thomas Thomson, Dr. Clinthus Gregory, and others, tending either to impugn or defend the trigonometrical survey of England and Wales collected by O G Svo. London, 1815
Gregory (Olinthus), W. S. B. Woolhouse, and James Hann: Tables for the use of nautical men, astronomers, and others, intended particularly as supplementary to the Nautical Almanac, and White's celestial atlas. 12mo. London, 1841
Gressler (F. G. L.):  Himmel und Erde, beschrieben und im Modell dargestellt  Achte Auflage. 8vo. Langensalza, 1853
Groombridge (Stephen): : *Astronomical Observations. 4to. London, 1820 : A catalogue of Circumpolar Stars, deduced from the observations of Stephen Groombridge reduced to January 1, 1810. Edited by G. B. Airy. 4to. London, 1838
Grove (William Robert):  —: A lecture on the progress of physical science since the opening of the London Institution.  Svo. London, 1842  —: On the correlation of the physical forces; being the substance of a course of lectures delivered in the London Institution in the year 1843.  Svo. London, 1846  —: The correlation of the physical forces. Sixth edition. With other contributions to science.  Svo. London, 1874
: Address to the British Association for the advancement of

—: \*On aplanatic telescopes. Grover (H. M.):

Changes of the poles and the equator considered as a source of error in the present construction of the maps and charts of the globe.

8vo. London, 1848

8vo. London, 1867 8vo. London, 1867

Grubb (Howard):

\*On a new form of equatorial telescope. 4to. Dublin, 1884

Grubb (Howard) and C. E. Burton:

Science. (On continuity.)

\*On a new form of Ghost micrometer for use with astronomical telescopes.

Svo. Dublin, 1880

Grubb (Thomas), Melbourne Telescope, see Robinson and Grubb.

Gruithuisen (Franz von Paula):
-: Ueber die Natur der Kometen, mit Reflexionen auf ihre
Bewohnbarkeit und Schicksale; bey Gelegenheit des
Kometen von 1811. 8vo. München, 1811
-: Selenognostische Fragmente Einleitung. 4to.
: Analekten für Erd- und Himmels-Kunde. Band 1. Heft
1-7. Svo. München, 1828-31
-: Neue Analekten für Erd- und Himmels-Kunde. Band 1,
2 (alter Reihe 8.–15. Heft) 8vo. München, 1834–36
: Kritik der Rede Schellings zum fünf und siebzigsten Jahres-
tag der königlich-Bayer'schen Akademie der Wissen-
schaften. Svo. München, 1834
—: Naturgeschichte des gestirnten Himmels. Eine neue, zufolge
ihrer Einrichtung jedem scientifisch Gebildeten fassliche
Darstellung der neuesten Lehren der Astronomie, nebst
tabellarischer Astronomie als Anhang. 8vo. München, 1836
: Astronomisches Jahrbuch für physische und naturhistorische
Himmelsforscher. Band 1–11. 8vo. München, 1838–51
— : Bedeutungsvolle und neue Erscheinungen bei der Sonnen-
finsterniss vom 8. Juli 1842. Svo. Stuttgart, 1842
Commont (Cottfried Trainmigh)
Grummert (Gottfried Heinrich):
Betrachtungen über die Mondenluft, bey Gelegenheit der
grossen Sonnenfinsterniss, am 25. des Heu-Monats 1748.
4to. Dresden und Leipzig, 1748
Grunert (Johann August):
— : Optische Untersuchungen. 1. Allgemeine Theorie der
Fernröhre und Mikroskope. 2. Theorie der achromatischen
Objective. 3. Theorie der zweifachen achromatischen
Oculare. 3 parts in 1 vol. 8vo. Leipzig, 1846–51
: Beiträge zur meteorologischen Optik und zu verwandten
Wissenschaften. Herausgegeben von J. A. G. Band 1,
Heft 1-4. 8vo. Leipzig, 1848-50
: Loxodromische Trigonometrie. Ein Beitrag zur Nautik.
8vo. Leipzig, 1849
: *Ueber die nautische Aufgabe: Aus den gemessenen Höhen
zweier Sterne, deren Rectascensionen und Declinationen
bekannt sind, und der Zwischenzeit der beiden Leobach-
tungen die Polhöhe und die Zeit zu bestimmen.
8vo. Greifswald, 1850
: *Neue Methode zur Berechnung der Cometenbahnen.
8vo. Greifswald, 1851
- : *Über die Proximitäten der Bahnen der Planeten und Kometen. 8vo. Wien, 1854
Kometen. 8vo. Wien, 1854: *Theorie der Sonnenfinsternisse, der Durchgänge der unteren
Planeten vor der Sonne, und der Sternbedeckungen für
einen gegebenen Ort der Erde. 2 parts, 4to. Wien, 1854-55
* L'ber eine geometrische Aufgabe, mit besonderer Rücksicht
auf die Bestimmung der Stillstandspunkte oder Stationen
der um die Sonne sich bewegenden Weltkörper.
8vo. Wien, 1855
- *Über eine astronomische Aufsabe. 8vo. Wien, 1855

---: De area trianguli loxodromici in superficie ellipsoidis.

--: \*Theorie der wahren und scheinbaren Bewegung eines

—: \*Neue näherungsweise Auflösung der Kepler'schen Aufgabe.

4to. Gryphiswaldiæ, 1859

8vo. Wien, 1856

Grunert (Johann August)-continued.

Inaugural Dissertation.

Weltkörpers um die Sonne, nebst neuen Methoden zur
Bestimmung der Bahn aus drei Beobachtungen.
8vo. Greifswald, 1857
: *Directe Bestimmung der Durchschnittspunkte der Bahnen
zweier in Kegelschnitten sich um die Sonne bewegender
Weltkörper. 4to. Wien, 1861 : *Allgemeine Theorie der Kegelschnitte als Curven im
Raume betrachtet, nebst deren Anwendung auf die Bestim-
mung der Bahnen der um die Sonne in Kegelschnitten
sich bewegenden Weltkörper und der Proximitäten dieser
Bahnen. 8vo. Greifswald, 1861
Gruppe (O. F.):
Die kosmischen Systeme der Griechen. 8vo. Berlin, 1851
Gruss (Gustav):
: *Über die Bahn der Loreley (165). 8vo. Wien, 1877 : *Bestimmung der Bahn des Kometen V, 1874.
8vo. Wien, 1878
Grynæus (Simon):
Commentarii duo, de ignitis meteoris unus : alter de cometarum
causis atque significationibus Accessit eiusdem ob-
servatio cometæ 1577-78 et disputatio de
inusitata magnitudine & figura Veneris 1578–79.
4to. [Basileæ, 1580]
Gualterotti (Raffaele), Nuova Stella, see Jacoli (Ferdinando).
Guarini (Giovanni), L. Palmieri, ed. A. Scacchi:
Memoria sullo incendio Vesuviano del mese di Maggio 1855. 4to. Napoli, 1855
Guarini (Guarino):
Calestis mathematica, pars prima, in qua leges antiqua et
novæ temporum ac planetarum digeruntur, et in tabulas ordinantur. fol. Mediolani, 1683
Guccia (J.):
*Sur une classe de surfaces, représentables, point par point, sur un plan. 8vo. Paris, [1880]

Guérin (J.):
Catalogue des manuscrits orientaux en langue Sanscrite, sur
l'astronomie, la médecine, &c. 8vo. Paris, 1855

Experimenta nova (ut vocantur) Magdeburgica de Vacuo Spatio . . . . quibus accesserunt simul certa quædam de aeris pondere circa terram ; de virtutibus mundanis & systemate mundi planetario ; sicut & de stellis fixis ac spatio illo immenso, quod tàm intra quam extra eas funditur.

fol. Amstelodami, 1672

Guericke (Otto von):

Guillemin (Amédée):
: Le Ciel: Notions d'astronomie à l'usage des gens du monde
et de la jeunesse. Svo. Paris, 1864
— : Ditto, quatrième édition. Svo. Paris, 1870
— : Le Ciel. Notions élémentaires d'astronomie physique
Cinquième édition. 8vo. Paris, 1877
: The Heavens: an illustrated handbook of popular astro-
nomy Edited by J. Norman Lockyer.
8vo. London, 1866
—: La Lune. Svo. Paris, 1866
: Le Soleil. Svo. Paris, 1869
: The Sun From the French by T. L. Phipson.
8vo. London, 1870
— : Les Comètes. 8vo. Paris, 1875
: The World of Comets Translated and edited by
James Glaisher. 8vo. London, 1877
: Les Nébuleuses : notions d'Astronomie sidérale.
Svo. Paris, 1880
Guimaraens (A. de Souza):
*Remarks on a paper on fluid cavities in Meteorites by H. Hensoldt. 8vo. London, 1883
by H. Hensoldt. 8vo. London, 1883
Guinand (Aimé):
Some account of the late M. G., and of the important dis-
covery made by him in the manufacture of Flint Glass for
large telescopes. (By E. R.) 8vo. London, 1825
Guinea:
Observationes meteorologicæ per annos 1829-34 & 1838-42
in Guinea factæ a J. J. Trentepohl, R. Chenon, F. Sannom.
4to. Haunie, 1845
Guldberg (C. M.):
Om Cirklers Beröring. Christiania Universitets-Program.
4to. Christiania, 1861
Guldberg (C. M.) et H. Mohn:
Guldberg (C. M.) et H. Mohn: Études sur les mouvements de l'atmosphère. Première partic.
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876 Guldberg (C. M.) et P. Waage:
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876 Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université,
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876 Guldberg (C. M.) et P. Waage:
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876 Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867.  Gumpach (Johannes von):
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856
Études sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Études sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856 —: A letter to William Hopkins on the subject of the
Etudes sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Etudes sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856 —: A letter to William Hopkins on the subject of the true figure and dimensions of the Earth.
Etudes sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Etudes sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856 —: A letter to William Hopkins on the subject of the true figure and dimensions of the Earth. 8vo. Guernsey [1862] —: A letter to Warren De La Rue [the same letter].
Etudes sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Etudes sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von):  — : Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853  — : A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856  — : A letter to William Hopkins on the subject of the true figure and dimensions of the Earth. 8vo. Guernsey [1862]  — : A letter to Warren De La Rue [the same letter]. 8vo. Guernsey [1862]
Etudes sur les mouvements de l'atmosphère. Première partic. 4to. Christiania, 1876  Guldberg (C. M.) et P. Waage: Etudes sur les affinités chimiques. Programme de l'Université, 1867. 4to. Christiania, 1867  Gumpach (Johannes von): —: Hülfsbuch der Rechnenden Chronologie, oder Largeteau's abgekürzte Sonnen- und Mondtafeln nebst Beispielen ihrer praktischen Anwendung. 8vo. Heidelberg, 1853 —: A popular inquiry into the Moon's rotation on her axis. 8vo. London, 1856 —: A letter to William Hopkins on the subject of the true figure and dimensions of the Earth. 8vo. Guernsey [1862] —: A letter to Warren De La Rue [the same letter].

Gumpaeh (Johannes von)—continued.
pendulum observations in a letter addressed to
G. B. Airy, Astronomer Royal. Second edition.
Svo. London, 1862
Gunter (Edmund):  —: Works: containing the description and use of his sector,
cross-staff, bow, quadrant, and other instruments: with a
canon of artificial sines and tangents to radius of 10,000,000
parts, and logarithms from an unite to 10,000 cor-
rected by H. Bond. Fourth edition, to which is added the
description and use of another sector also of a quadrant by Sam. Foster. Enlarged by W. L[eybourn].
4to. London, 1662
: Ditto, fifth edition. 4to. London, 1673
Günther (Friedrich Wilhelm):
De perturbationibus quas Saturnus per integram revolutionem
in Palladem exercet; commentatio astronomica, cui
Palladis orbitae determinatio nova superstruitur. [Inaugural Dissertation.] 4to. Wratislaviae, 1860
Günther (Joh. Jac.):
Populäre Betrachtung über die Kometen, mit Bezug auf die
uns in diesem (1834) oder folgenden Jahre (1835) bevor-
stehende Erscheinung des sogenannten Halley'schen
Kometen. 12mo. Cüln, 1834
Gussew (H.):
*Über die Gestalt des Mondes. Svo. St. Petersburg, 1860
Guynemer (A. M. A.):
Dictionnaire d'astronomie à l'usage des gens du monde, 8vo. Paris, 1852
Guyot (Arnold):
: *A collection of meteorological tables, with other tables useful in practical meteorology. Svo. Washington, 1852
useful in practical meteorology. 8vo. Washington, 1852
—: Ditto, second edition (tables meteorological and physical).  Svo. Washington, 1858
Gyldén (Hugo):
-: *Untersuchungen über die Constitution der Atmosphäro
und die Strahlenbrechung in derselben. (Abhandlungen
I und II.) 4to. St. Petersburg, 1866-68
—: *Über eine Methode die Störungen eines Cometen vermit- telst rasch convergirender Ausdrücke darszustellen.
8vo. St. Petersburg, 1869
-: *Studien auf dem Gebiete der Störungstheorie. I. Ent-
wicklung einiger Verbindungen elliptischer Functionen.
4to. St. Pétersbourg, 1871
— : *Relationer emellan Stjernornas glans, antal och relativa medelafstånd från vår ståndpunkt i verldsrymden.
8vo. Stockholm, 1872
: *Formler och tabeller för beräkning af fyrars lysvidd.
8vo. Stockholm, 1872
: *Om stjernkatalogen i Lacaille's 'Astronomiæ Fundamenta.'

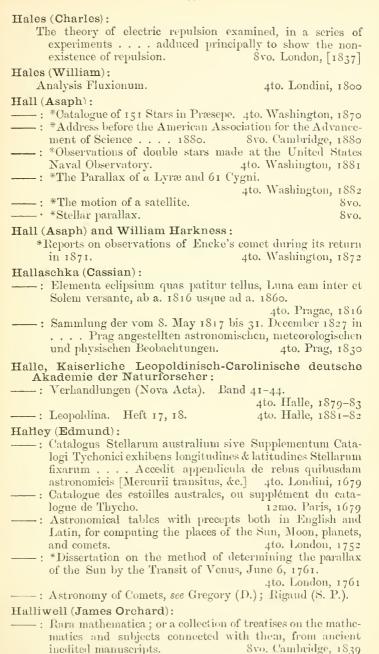
Gyldén (Hugo)—continued.
-: *Förteckning öfver rektascensionerna för 103 Funda-
mentalstjernor. Svo. Stockholm, 1874
: *Om en method för den analytiska härledningen af de små
planeternas relativa störingar. 8vo. Stockholm, 1874
-: *Grunddragen af en method för beräkningen af absoluta
störingar, med hufvudsakligt afseende på de små plane-
ternas banor. Svo. Stockholm, 1875
: Die Grundlehren der Astronomie nach ihrer geschichtlichen
Entwickelung dargestellt. 8vo. Leipzig, 1877
—: *Ueber die mittlere Parallaxe der Fixsterne erster Grösse.
8vo. Leipzig, 1877
-: *Ueber die Bahn eines materiellen Punktes, der sich
unter dem Einflusse einer Centralkraft von der Form
$\frac{\mu_2}{r^2} + \mu_2 r$ bewegt. 4to. Stockholm, 1879
: * Sur la sommation des fonctions périodiques.
4to. Paris, 1879
: *Versuch einer mathematischen Theorie zur Erklärung des
Lichtwechsels der veränderlichen Sterne.
4to. Helsingfors, 1880
: *Om banan af en punkt, som rör sig i en sferoids equators-
plan under inverkan af den Newtonska attraktionskraften.
8vo. Stockholm, 1880
: *Ueber die Theorie der Bewegungen der Himmelskörper.
4to. Kiel.
—: *Eine Annäherungsmethode im Probleme der drei Körper.
4to.
: *Ueber die Convergenz der successiven Annäherungen bei
der theoretischen Berechnung der Bahnen der Himmels-
körper. Svo. Leipzig [1881]
: *Undersökningar af theorien för himlakropparnas rörelser.
1-3. 8vo. Stockholm, 1881-82
-: *Bestämning af afståndet till stjernan No. 3077 i.
Bradley's Katalog. Svo. Stockholm, 1882
: *Ueber die absoluten Elemente der Planetenbahnen.
4to. Kiel, 1882
: See also Stockholm, Observatorium.
Györy (Sándor):
A' Felsöbb Analysis' Elemei. Parts 1, 2. 4to. Budán, 1836-40
Haarlem, Musée Teyler:
——: Archives. Vol. 1–4. 8vo. Haarlem, 1868–1878
—: Série 2. Part 1–3. 8vo. Haarlem, 1881–82
Haase (Carl):
— : Die Sonnenfinsterniss. Populär beschrieben, nebst erläu-
ternden Angaben für die totale Finsterniss am 18. Julius
1860. Svo. Hannover, 1860
: *Einige Zusammenstellungen als Beitrag zu der Frage,
ob ausser Mercur und Venus in dem Raume zwischen
Sonne und Erde noch andere planetenartige Körper vor-
handen sind. , Herausgegeben von C. A. F. Peters.
8vo. Hannover, 186.4

\*Hadley (John, George and Henry), (biographical account of). Hadley's Quadrant (the nature and use of), with . . . a description of the Nonius. 8vo. London. \*Hadley's Quadrant (invention and history of). 8vo. Hagecius [Hageck] (Thaddeus): - : Dialexis de novæ et prius incognitæ stellæ inusitatæ magnitudinis & splendidissimi luminis apparitione, & de eiusdem stellæ vero loco constituendo. Adiuncta est ibidem ratio investigandæ parallaxeos cuiuscunque Phænomeni, eiúsque à centro terræ distantia. . . . 4to. Francofurti ad Mænum. 1574 --: Responsio ad virulentem & maledicum Hannibalis Raymundi . . . . scriptum; quo iterum confirmare nititur, Stellam, quæ anno LXXII & LXXIII supra sesquimillesimum fulsit, non nouā, sed veterem fuissc. 4to. Prage, 1576 Hagen (Gotthilf Heinrich Ludwig): \*Über die Wärme der Sonnenstrahlen. 4to. Berlin, 1864 Hagens (Joachim Heinrich): Bemerkung der jüngsten grossen Comet-Erscheinungen, auf Hoch-Fürstlichen gnädigsten Befehl, verabfasst und hervorgegeben. 4to. Bayreut, 1681 Hague (The), Commission géodésique Néerlandaise: Publications, No. 1: Détermination, à Utrecht, de l'Azimut d'Amersfoort, par J. A. C. Oudemans. 4to. La Haye, 1881 Hahn (Friedrich Gustav): Ueber die Beziehungen der Sonnenfleckenperiode zu meteorologischen Erscheinungen. Inaugural-Dissertation. 8vo. Leipzig, 1877 Hahn (Otto): Die Meteorite (Chondrite) und ihre Organismen. 4to. Tübingen, 1880 Haidinger (Wilhelm): ----: Berichte über die Mittheilungen von Freunden der Naturwissenschaften in Wien. Band 1, 2. 8vo. Wien, 1847 -: Naturwissenschaftliche Abhandlungen, gesammelt und . . . . herausgegeben von W. H. . . . Band 1. 4to. Wien, 1847 ---: \*Herrn Director Julius Schmidt's Beobachtung der Meteore in der Nacht des 13.-14. November 1866. 8vo. Wien, 1866 Hailes (John Davey): —: Astronomy, established on a principle practically proving the words of Joshua, 'Sun, stand thou still upon Gibeon, and thou, Moon, in the valley of Ajalon.' 16mo. London, 1843 — : Instructions for J. D. Hailes's universal orrery globe.

——: The Hailesean system of Astronomy . . . . displaying Joshua's miracle time, origin of time from science; with Bible and Egyptian history.

12mo. Cambridge, 1865

8vo. London, 1848



Contains Sacro Bosco de Arithmetica, J. Robyns de Cometis, &c.

Halliwell (James Orchard)—continued.
: A collection of letters illustrative of the progress of science
in England from the reign of Queen Elizabeth to that of
Charles the second. 8vo. London, 1841
Halma, see Aratus; Ptolemy; Theon.
Haly, see Albohazen Haly.
Hamburg, Sternwarte:
: Mittlere Oerter von 12,000 Fix-Sternen, für den Aufang
von 1836 von C. Rümker. obl. fol. Hamburg, 1843 ——: Meteorological Observations made at the Observatory of
Hamburg by M. Rümker (1853–56). 4to.
— : Publicationen. Herausgegeben von G. Rümker. No. 1.
Stern-Haufen im Sternbilde des Sobieski'schen Schildes,
von F. R. Helmert. 4to. Hamburg, 1874
Hamilton (George):
- : A law of elliptic motion, deduced from the laws of gravita-
tion and compound rotation. 8vo. Liverpool, 1873
— : Remarks on Prof. Hamilton's paper by J. Clerk Maxwell. 8vo. Liverpool, 1873
: Progressive changes of form in rotating spheroids (Sun,
planets, &c.) from cooling and contraction of their mass.
8vo. Liverpool, 1874
Hamilton (Hugh):
——: A geometrical treatise of the conic sections, in which the properties of the sections are derived from the nature of
the cone. 4to. London, 1773
: Philosophical Essays. I. On the ascent of vapours, the
formation of clouds, rain, and dew, and on several other
phonomena of air and water. 2. Observations and con-
jectures on the nature of the Aurora Borealis, and the tails of Comets. 3. On the principles of mechanicks. Fourth
edition. 12mo. London, 1783
Hamilton (William Rowan):
: *The first part of an essay on the theory of systems of rays.
4to. Dublin, 1828
: *Supplement. 4to. Dublin, 1830 : *Second supplement. 4to. Dublin, 1830
: *Second supplement. 4to. Dublin, 1830 : *On the error of a received principle of analysis, respecting
functions which vanish with their variables.
4to. Dublin, 1830
: *On a general method of expressing the paths of light, and
of the planets, by the coefficients of a characteristic func-
tion. Svo. Dublin, 1833: *On a general method in Dynamics. 4to. London, 1834
: *Theory of conjugate functions, or algebraic couples, with a
preliminary and elementary essay on algebra as the science
of pure time. 4to. Dublin. 1835
: *Abstracts of additional communications on Quaternions.  8vo. Dublin, 1846
- : A letter to Augustus De Morgan on his claim to

— : Lectures on quaternions, containing a systematic statement

- : Elements of quaternions . . . . Edited by William Edwin

---: \*Researches respecting quaternions. First series.

an independent re-discovery of a new principle in the theory

Svo. London and Edinburgh, 1847

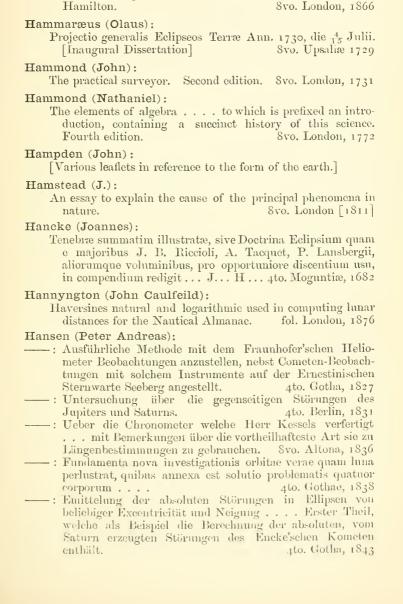
4to. Dublin, 1847

8vo. Dublin, 1853

Hamilton (William Rowan)—continued.

of a new mathematical method.

of syllogism.



Hansen (Peter Andreas)—continued.
: *Darlegung eines Verfahrens um die absoluten Störungen der Himmelskörper zu berechnen. 8vo. Berlin, 1843
: Theorie der Pendelbewegung, mit Rücksicht auf die Gestalt
und Bewegung der Erde Gekrönte Preisschrift.
4to. Danzig, 1853
— : *Auseinandersetzung einer zweckmässigen Methode zur
Berechnung der Absoluten Störungen der kleinen Planeten
Erste Abhandlung. 8vo. Leipzig (1857)
Erste Abhandlung. 8vo. Leipzig (1857)  ——: Tables de la lune, construites d'après le principe New-
tonien de la gravitation universelle. 4to. Londres, 1857
- : Corrections to ditto, see Newcomb.
-: *Einleitende Bemerkungen über seine dritte Abhandlung:
Auseinandersetzung einer zweckmässigen Methode zur Berechnung der absoluten Störungen der kleinen Planeten.
8vo. Leipzig, 1859
—: Über die Einrichtung der neuen herzoglichen Sternwarte
zu Gotha. 8vo. Leipzig, 1859
: *Darlegung der theoretischen Berechnung der in den
Mondtafeln angewandten Störungen.
2 parts, 8vo. Leipzig, 1862-64
- : *Einige Bemerkungen über die Säcularänderung der mitt-
leren Länge des Mondes. 8vo. Leipzig [1863]
: *Relationen einestheils zwischen Summen und Differenzen,
und anderntheils zwischen Integralen und Differentialen. 8vo. Leipzig, 1865
: *Geodätische Untersuchungen. 8vo. Leipzig, 1865
: *Nachtrag. 8vo. Leipzig, 1866
: *Nachtrag zur Abhandlung 'Entwickelung des Produkts
einer Potenz des Radius Vectors.' 8vo. Leipzig, 1866
: *Theorie der Eingriffe gezahnter Räder in einander.
8vo. Leipzig, 1866
: *Tafeln der Egeria. 8vo. Leipzig, 1867
: *Von der Methode der kleinsten Quadrate im Allgemeinen,
und in ihrer Anwendung auf die Geodäsie. 8vo. Leipzig, 1867
: *Fortgesetzte geodätische Untersuchungen, bestehend in
zehn Supplementen zur Abhandlung von der Methode der
kleinsten Quadrate. Svo. Leipzig, 1868
- : Gegenbericht an die permanente Commission der Euro-
päischen Gradmessung. 4to, Gotha, 1868
: *Entwickelung eines neuen veränderten Verfahrens zur
Ausgleichung eines Dreiecksnetzes. 8vo. Leipzig, 1869
: *Bestimmung der Sonnenparallaxe durch Venusvorüber-
gänge vor der Sonnenscheibe mit besonderer Berücksichti-
gung des im Jahre 1874 eintreffenden Vorüberganges. 8vo. Leipzig, 1870
-: *Von der Bestimmung der Theilungsfehler eines gradlini-
gen Maassstabes. 8vo. Leipzig, 1874
Hansen (Peter Andreas), A. Auwers, und E. Bruhns:
*Bestimmung des Längenunterschiedes zwischen den Stern-
warten zu Gotha und Leipzig. 8vo. Leipzig, 1866

# Hansen (Peter Andreas) et C. F. R. Olufsen:

Tables du solcil exécutées d'après les ordres de la Société royale des Sciences de Copenhague. 4to. Copenhague, 1853

Hansteen (Christopher):

- : Untersuchungen über den Magnetismus der Erde . . . . Erster Theil : die mechanischen Erscheinungen des Magneten. 4to. Christiania, 1819
- : Disquisitiones de mutationibus, quas patitur momentum acus magneticæ. [Inaugural Dissertation.] 4to. Christianiæ, 1842
  : \*Sur le magnétisme terrestre. 8vo. Bruxelles [1859]

Hansteen (Christopher) und Carl Fearnley:

Beschreibung und Lage der Universitäts-Sternwarte in Christiania, 4to. Christiania, 1849

Harding (Karl Ludwig):

- ---: Atlas novus celestis xxvII tabulis, continens stellas inter polum borealem et trigesimum gradum declinationis australis adhuc observatas. fol. Gottingae, 1822
- ——: Neuer Himmelsatlas von 27 Tafeln, enthaltend die bis jetzt zwischen dem Nordpol und dem 30. Grade südlicher Abweichung beobachteten Sterne. Neue . . . . Ausgabe. fol. Halle a. S., 1856

## Hardy (James):

Complete system of interest and annuities, founded upon new, easy, and rational principles. 12mo. London, 1753

# Hardy (R. W. H.):

Incidental remarks on some properties of light; being part v. of an essay on vision. Svo. London, 1856

## Harkness (William):

---: \*Report on the difference of longitude between Washington and St. Louis. 4to. Washington, 1872

—: \*On the color correction of achromatic telescopes.

8vo. New Haven, 1879

—: \*On the relative accuracy of different methods of determining the solar parallax. Svo. New Haven, 1881

: Encke's Comet, see Hall and Harkness.
: See also Washington, U.S. Naval Observatory.

# Harley (Timothy):

Lives which live: a series of biographical reviews. I. Sir John Herschel. Svo. London, 1884

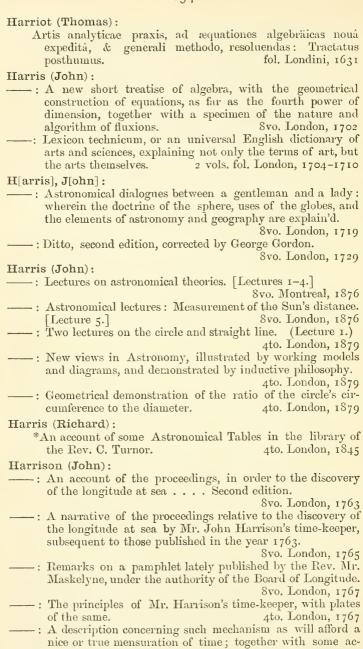
Harpur (Alexander):

The nature of visible magnitude. The deductions by which the relative magnitudes of the planets, and the absolute magnitude of the Sun, and consequently the magnitudes of the Moon and of the planets are determined in the received astronomical system, proved to be fallacious.

8vo. Dublin, 1856

Harrington (G. F.);

\*An important discovery on light. [Extract from the 'Portsmouth Times,']



count of the attemps for the discovery of the longitude by

the Moon.

8vo. London, 1775

Harrison (J. Park):

\*On the relation of Insolation to atmospheric humidity.

8vo. London, 1867

Harrison (William A.):

A manual of physiography. 12mo. London and Derby [1879] Hartmann (Fr. J.):

Was hat die Welt zu fürchten von dem Kometen des Jahres

1834? Oder über die sechste Erscheinung des Halley'schen Kometen und über Kometen im Allgemeinen.

8vo. Quedlinburg und Leipzig, 1830

Hartmann (Martinus):

Disputatio de Luce Cometarum [Inaugural Dissertation]. 4to. Jenæ, 1666

Hartnup (John):

---: \*Meteorological Results deduced from observations taken at the Liverpool Observatory during . . . . 1850-52. By John Hartnup. 8vo. Liverpool, 1854

---: \*Results deduced from observations taken with the selfregistering anemometer and rain-gauge, at the Liverpool Observatory, during the four years ending Dec. 31, 1855. 8vo. Liverpool, 1856

--: \*On controlling the movements of ordinary clocks by galvanic currents. 8vo. Liverpool, 1857

Hartwig (-):

Über die Berechnung der Auf- und Untergänge der Sterne. [Inaugural Dissertation.] 4to. Schwerin, 1861

Hartwig (Ernst):

--: \*Untersuchungen über die Durchmesser der Planeten Venus und Mars. 4to. Leipzig, 1879

- : Beitrag zur Bestimmung der physischen Libration des Mondes, aus Beobachtungen am Strassburger Heliometer . . . Inaugural-Dissertation. 4to. Karlsruhe, 1880

---: \*Der grosse Septembercomet von 1882 und sein Begleiter vom 9. October. 4to. Kiel, 1883

Harvard College Astronomical Observatory:

4to. Cambridge, 1856-82 ---: Annals, Vol. 1-13, Part 1.

Vol. I, Part I. History and description of the Observatory.

2. Zone Observations.

2, Part I. Observations of Saturn, 1847-57. W. C. Bond.

2. Zone Observations.

3. Account of the great Comet of 1858. G. P. Bond.

4, Part 1. Catalogue of standard polar & clock stars. T. H. Safford.

2. R.A. of 505 stars. T. H. Safford.

5. Observations of the Great Nebula of Orion. G. P. Bond.

6. Zone Catalogue of 6100 stars.

7. Observations of solar spots, 1747-49. W. C. Bond.

8, Part 1. Historical account of Observatory, Instruments, &c.

2. Drawings of the moon, planets, nebulæ, comets, &c.

9. Photometric researches. C. S. Peirce.

10. Observations with the meridian circle.

Vol. 11, Part 1. Photometric observations. E. C. Pickering.
<ul><li>12. Catalogue of stars for 1875, &amp;c.</li><li>13, Part 1. Micrometric measurements of double stars, &amp;c.</li></ul>
: Reports, 1859-61, 1863, 1877-80, 1882-84.  Svo. Boston and Cambridge, 1860-84 : Statement of work done during the years 1877-82.  8vo. Cambridge, 1882
: *List of new Nebulæ and Star-Clusters.  8vo. Cambridge, 1863
: *A catalogue of the declinations of 532 stars culminating near the zenith of the Observatory.  By T. H. Safford.  4to. Cambridge, 1861
—: *Catalogue of 618 stars observed with the Meridian Circle during the years 1871-2, 1874, and 1875. By William A. Rogers. 4to. Cambridge, 1880—: See also Bond (G. P.); Pickering (E. C.)
Harvey (George):
*On a remarkable case of magnetic intensity of a chronometer.  4to. Edinburgh, 1823
Harzer (Paul):
Brorsen's Comet im Jahre 1842. Inaugural-Dissertation. 4to. Leipzig, 1878
Hasselberg (B.):  —: *Russische Expeditionen zur Beobachtung des Venusdurch-
gangs 1874. Bearbeitung der photographischen Aufnahmen im Hafen Possiet. 4to. St. Petersburg, 1877—: *Studien auf dem Gebiete der Absorbtionsspectralanalyse. 4to. St. Pétersburg, 1878
: *Über das durch electrische Erregung erzeugte Leuchten der
Gase bei niedriger Temperatur. 4to. St. Pétersbourg, 1879
: *Untersuchungen über das zweite Spectrum des Wasserstoffs. Abhandl. 1, 2. 4to. St. Pétersbourg, 1882-83
Hassenfratz (J. H.):
Cours de physique céleste, ou leçons sur l'exposition du systême du monde, données à l'École Polytechnique en l'an dix. 8vo. Paris, 1803
Hassler (Ferdinand Rod):
—: *Papers on various subjects connected with the survey of
the coast of the United States. 4to. Philadelphia, 1824  Elements of analytic trigonometry, plane and spherical.
8vo. New York, 1826 ——: A popular exposition of the system of the universe. 8vo. New York, 1828
-: Plates and tables. obl. 4to. New York, 1828
: Elements of the geometry of planes and solids.  8vo. Richmond [U.S.], 1828
: Logarithmic and trigonometric tables to seven places of

Hassler (Ferdinand Rod)—continued.

decimals, in a pocket form, in which the errors of former tables are corrected.

12mo. New York, 1830

: Comparison of weights and measures of length and capacity, reported to the Senate of the United States.

8vo. Washington, 1832

: Principal documents relating to the survey of the coast of the United States since 1816. Svo. New York, 1834

Hausen (Christian Aug.):

Elementa matheseos. Pars prima (elementa arithmeticæ et geometriæ; trigonometria, geometria sectionum conicarum).

4to. Lipsiæ, 1734

Haüy (René Just):

An elementary treatise on natural philosophy, translated from the French . . . . by Olinthus Gregory.

2 vols. 8vo. London, 1807

Havemann (Michael):

Astræa, sive epitomæ sideralis scientiæ.

4to. Francofurti ad Moenum, 1650

Hawkesworth (John):

Account of the voyages undertaken . . . . for making discoveries in the Southern Hemisphere, and successively performed by Commodore Byron, Captains Wallis, Carteret, and Cook in the *Dolphin*, the *Swallow*, and the *Endeavour*.

3 vols. 4to. London, 1773

Hawkins (Aaron):

The Gregorian and Julian calendars: wherein are taught how to find arithmetically the leap-years, golden number, epacts [&c.]... in both accounts, for ever. Svo. London, 1752

Hawkins (John), Arithmetic, see Cocker (E.)

Hawney (William):

—— : The compleat measurer; or the whole art of measuring; in two parts. Second edition. 12mo. London, 1721

The doctrine of plain and spherical trigonometry, with its application and use in . . . Navigation, astronomy, projection of the sphere, geography, fortification, mensuration, dialling.
 8vo. London, 1725

Hayden (W.):

A very close approach to the geometrical quadrature of the circle.

8vo. Chichester, 1872

Haynisch (Johann Christoph):

Systema Copernicanum Scripturae sacrae non esse oppositum
. . . . demonstrat . . J . . C . . H. [Inaugural Dissertation.]

4to. Jenae, 1724

Heap (John) and G. V. Vernon:

\*On the rain-fall at Oldham during the years 1836 to 1862. 8vo. London, 1864

Heath (Robert):

Astronomia accurata, or the royal astronomer and navigator, containing new improvements in astronomy, chronology,

Heath (Robert)—continued.

and navigation, particularly new and correct solar and lunar tables, 1 vol. and supplement. 4to. London, 1760-68

Heeht (Heinrich August):

Der schöne Halley, ein Komet, den wir mit dem Jahre 1834 wieder zu erwarten haben. 8vo. Ilmenau, 1833

Hoegmann (Alph.):

\*Théorie de la réfraction astronomique. 8vo. Lille, 1856

## Heinsius (Gottfried):

De phasi rotunda Saturni quae an. MDCCLX rediit observationes et conclusiones. [Inaugural Dissertation]. 4to. Lipsiae, 1762

#### Heis (Eduard):

— : Die periodischen Sternschnuppen und die Resultate der Erscheinungen, abgeleitet aus den während der letzten 10 Jahre zu Aachen angestellten Beobachtungen. 4to. Cöln, 1849

---: Demagnitudine relativa numeroque accurato Stellarum quae solis oculis conspiciuntur Fixarum. [Inaugural Disserta-4to. Coloniae ad Rhenum, 1852 tion.

—: \*Sur les étoiles filantes périodiques du mois d'août 1858. Lettre à M. Quetelet. 8vo. Bruxelles, 1859

—: \*Die grosse Feuerkugel, welche am Abende des 4. März 1863 in Holland, Deutschland, Belgien und England gesehen worden ist. 8vo. Halle, 1863

— : Grosse Feuerkugel in der Nacht des 10.–11. März (1866) in Westfalen und Hannover. Svo. Halle, 1866

—: Sammlung von fünf Sterncharten . . . . zum Einzeichnen der Sternschnuppen der November-Periode. 4to. Köln, 1868

— : Atlas Coelestis Novus. Stellae per mediam Europam solis 

Errata in ditto, see U.S. Coast Survey.

—: Beobachtungen, deren Anstellung den Mitgliedern der

Expeditionen zur Beobachtung des Durchganges der Venus anempfohlen wird. 4to. Münster, 1874

- : Zodiacallicht-Beobachtungen in den letzten 29 Jahren, 1847-4to. Münster, 1875

—: Resultate der in den 43 Jahren 1833-1875 angestellten 4to. Münster, 1877 Sternschnuppen-Beobachtungen.

— : Atlas Coelestis Eclipticus . . . . octo continens tabulas ad delineandum Lumen Zodiacale.

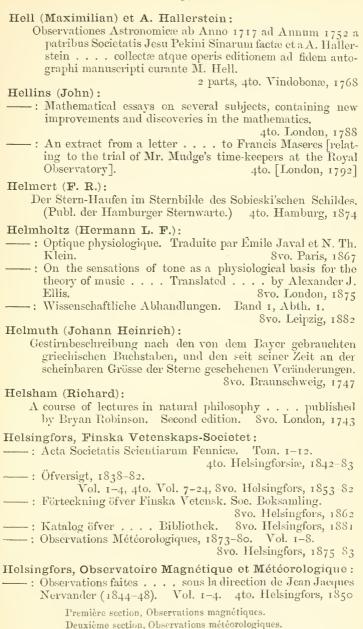
obl. fol. Coloniae ad Rhenum, 1878

# Hell (Maximilian):

Tabulæ solares (lunares et planetarum) ad meridianum Parisinum, quas . . . . deduxit . . . . N. L. de la Caille (T. 8vo. Vindobonæ, 1763-64 Mayer, J. Cassini).

## Hell (Maximilian):

Observatio transitus Veneris ante discum Solis die 3 Junii anno 1769 Wardoëhusii . . . . facta. 4to. Hafniæ, 1770



4to. Helsingfors, 1873

——: Observations. Vol. 5.

— : Zonen-Beobach tungen, see Krueger (A.).

Helvicus (Christoph.):

Theatrum historicum et chronologicum . . . . Nunc de novo recognitum . . . . à Johanne-Justo Winkelmanno . . . . Editio quinta. fol. Francofurti ad Moenum, 1666

Henderson (E.):

Life of James Ferguson, in a brief autobiographical account 8vo. Edinburgh, 1867 and further extended memoir.

Henderson (Thomas):

....: \*On the declinations of the principal fixed stars, deduced from observations made at the observatory, Cape of Good Hope, in the years 1832 and 1833. 4to. London, 1837

-: Life, see Galloway; Observations, see Edinburgh, Royal

Observatory.

Henischius (Georgius):

Tabulæ Institutionum Astronomicarum . . . . Adiuncta est sphera Procli, cum textu Greco è regione in latinam linguam converso. 4to. Augustæ Vindelicorum, 1575

Henly (William):

\*Experiments and observations on a new apparatus, called a machine for exhibiting perpetual electricity.

4to. London, 1776

Hennessy (Henry):

\*On the influence of the earth's internal structure on the 8vo. London, 1856 length of the day.

Henry (Joseph):

\*Meteorology in its connection with agriculture.

Svo. Washington, 1858

Henry (Paul et Prosper):

\*Sur un nouveau télescope catadioptrique. 4to. Paris, 1879

Herapath (John):

Mathematical physics, or the mathematical principles of natural philosophy; with a development of the causes of heat, gaseous elasticity, gravitation, and other great phenomena of nature. 2 vols. 8vo. London, 1847

Herény, Astrophysikalisches Observatorium:

Publikationen . . . . Herausgegeben von Eugen von Gothard. Heft 1. 4to. Herény, 1884

Herlicius (Christian):

Eclipsiologia: das ist gründliche, wahre, natürliche, astronomische und historische Beschreibung der vier erschrecklichen Finsternissen . . . . welche sich begeben und zutragen auffs Jahr . . . . 1634. 4to. 1633

Hermann (Jacob):

Phoronomia, sive de viribus et motibus corporum solidorum et fluidorum libri duo. 4to. Amstelædami, 1716

Hermes Trismegistus: De decubitu infirmorum, see Boderius.

Herpin (A.):

Dictionnaire astronomique, ou exposé par ordre alphabétique des principes fondamentaux et des lois générales de la mécanique universelle. 8vo. Paris, 1875

*Sur les étoiles filantes, 1861. 8vo. Bruxelles, 1862
Herschel (Alexander Stewart):  : *Method of determining the path of a meteor.
Svo. London, 1863 : Observations and real path of the fireball of 1879, September 23rd, 8h 10m p.m. (Scotland and the north of England).  Svo.
: *Notice of the fall of an aërolite near Middlesborough, Yorkshire, on the 14th of March, 1881. 16mo. Newcastle on Tyne
Herschel (Carolina):
Catalogue of stars, taken from Mr. Flamsteed's observations contained in the second volume of the Historia Collectis, and not inserted in the British Catalogue; to which is added a collection of errata that should be noticed in the same volume with remarks by William Herschel.  fol. London, 1798
[Herschel(John)]:
- : *Bibliography of pendulums in connection with the figure of the Earth. 4to. Calcutta, 1879 - : *Table of provisional equatorial vibration-numbers of pendulums used differentially since 1800; followed by a synopsis of pendulum observations from 1672 to 1874.  4to. Calcutta, 1879
Herschel (Mrs. John):  Memoir and correspondence of Caroline Herschel,  8vo. London, 1876
Herschel (John Frederick William):
: A collection of examples of the applications of the calculus of finite differences.  8vo. Cambridge, 1820 Forming Part 3 of Peacock's examples of the calculus.
: *On the reduction of certain classes of functional equations to equations of finite differences. 4to. Cambridge, 1820
: Light. [Encyclopædia Metropolitana.] 4to. [London, 1827] : A preliminary discourse on the study of natural philosophy.
[Lardner's Cabinet Cyclopædia.] 12mo. London, 1831 —: *On the absorption of light by coloured media, viewed in
connexion with the undulatory theory. Svo. London, 1833  : A treatise on Astronomy. [Lardner's Cabinet Cyclopedia.]  12mo. London, 1833
: *Observations of Nebulæ and clusters of stars, made at Slough, with a twenty-feet reflector, between the years
the years 1831, 1832, and 1833. 4to. London, 1834
in classes, for the trial of telescopes in various respects, as to light, distinctness, &c. 4to. London, 1834
to light, distinctness, &c. 4to. London, 1834  **On the satellites of Uranus. 4to. London, 1834

Herschel (John Frederick William)—continued.
: *On the advantages to be attained by a revision and re-
arrangement of the constellations, with especial reference
to those of the southern hemisphere. 4to. London, 1841
: Memoir of Francis Baily. 8vo. London, 1845
: Results of Astronomical Observations made during the years
1834-38 at the Cape of Good Hope; being the completion
of a telegrapia survey of the whole surface of the width
of a telescopic survey of the whole surface of the visible
heavens, commenced in 1825. 4to. London, 1847
- : Outlines of Astronomy. 8vo. London, 1849
— : Ditto, fifth edition. 8vo. London, 1858
: Ditto [Translated into Chinese, by A. Wylie.]
3 vols. Shanghae, 1874
: *On the algebraic expression of the number of partitions
of which a given number is susceptible. 4to. London, 1850
- : Essays from the Edinburgh and Quarterly Reviews, with
addresses and other pieces. 8vo. London, 1857
-: An essay, entitled The Yard, the Pendulum, & the
Metre, considered in reference to the choice of a standard of
length. Svo. London, 1863
: *A general catalogue of nebulæ and clusters of stars, ar-
ranged in order of Right Ascension and reduced to the
common epoch 1860. 4to. London, 1864
: *Supplement, by J. L. E. Dreyer. 4to. Dublin, 1878
: *A catalogue of 10,300 multiple and double stars arranged
in the order of right ascension Edited by R. Main
and C. Pritchard. 4to. London, 1874
- : Life, see Harley; Pritchard; Quetelet.
. The, see Harrey, Tironara, Queveres.
Herschel (John Frederick William) and James South:
*Observations of the apparent distances and positions of 380
double and triple stars, made in the years 1821, 1822, and
1823. 4to. London, 1825
Herschel (William):
: *Astronomical observations on the periodical star in collo
Ceti. 4to. London, 1780
: *Astronomical observations relating to the mountains of
the Moon. 4to. London, 1780
: *Astronomical observations on the rotation of the planets
round their axes, made with a view to determine whether
the Earth's diurnal motion is perfectly equable.
4to. London, 1781
: *Account of a comet. [Uranus.] 4to. London, 1781
: *On the parallax of the fixed stars. 4to London, 1782
- : *Catalogue of double stars. 4to. London, 1782
-: *Description of a lamp-micrometer, and the method of
using it. 4to. London, 1782
: *A paper to obviate some doubts concerning the great
magnifying powers used 4to. London. 1782
: *A letter to Sir Joseph Banks, [upon the name of
the newly discovered planet. 4to, London, 1782

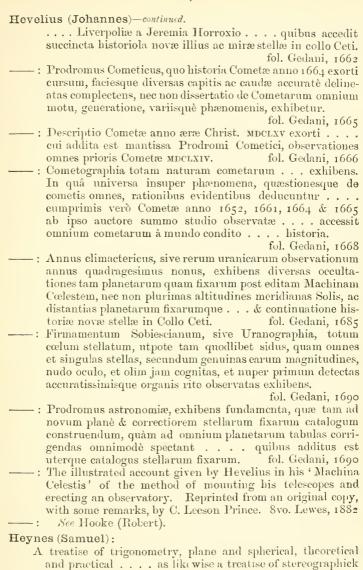
Herschel (William)—continued.
: *On the diameter and magnitude of the Georgium Sidus,
with a description of the dark and lucid disk and periphery
micrometers. 4to. London, 1783 : *On the proper motion of the Sun and solar system, with an
account of several changes that have happened among the
fixed stars since the time of Mr. Flamstead. 4to. London, 1783
-: *On the remarkable appearances at the polar regions of
the planet Mars, the inclination of its axis, the position of
its poles, and its spheroidical figure. 4to. London, 1784
-: *Account of some observations tending to investigate the
construction of the heavens. 4to. London, 1784
: *Catalogue of double stars. 4to. London, 1785 : *On the construction of the heavens. 4to. London, 1785
: *Catalogue of one thousand new nebulæ and clusters of stars.
4to. London, 1786
-: *Investigation of the cause of that indistinctness of vision
which has been ascribed to the smallness of the optic
pencil. 4to. London, 1786
-: *An Account of the discovery of two satellites revolving
round the Georgian planet. 4to. London, 1787  : *An account of three volcanoes in the Moon.
4to. London, 1787
-: *On the Georgian planet and its satellites.
4to. London, 1788
—: *Observations on a Comet. 4to. London, 1789
: *Catalogue of a second thousand of new nebulæ and
clusters of stars, with a few introductory remarks on the construction of the heavens.  4to. London, 1789
construction of the heavens. 4to. London, 1789 : *Account of the discovery of a sixth and seventh satellite
of the planet Saturn; with remarks on the construction of
its ring, its atmosphere, its rotation on its axis, and its
spheroidical figure. 4to. London, 1780
-: *On the satellites of the planet Saturn, and the rotation
of its ring on an axis. 4to. London, 1790 : *On nebulous stars, properly so called. 4to. London, 1791
: *On the ring of Saturn, and the rotation of the fifth satel-
lite upon its axis.  4to. London, 1792
-: *Miscellaneous observations. (Account of a Comet; On
the periodical appearance of o Ceti; On the disappearance
of the 55th Herculis; Remarkable phænomena in an eclipse
of the Moon.) 4to. London, 1792
: *Observations on the planet Venus. 4to. London, 1793 : *Observations of a quintuple belt on the planet Saturn, also
an account of some particulars observed during the late
eclipse of the Sun, and also on the rotation of the planet
Saturn upon its axis. 4to. London, 1794
*** * * * * * * * * * * * * * * * * * *
: *Description of a forty-feet reflecting telescope.
4to. London, 1795
4to. London, 1795 : *On the method of observing the changes that happen to the
4to. London, 1795

Herschel (William)—continued.
brightness, for ascertaining the permanency of the lustre of
stars. 4to. London, 1796
: *On the periodical star a Herculis; with remarks tending
to establish the rotatory motion of the stars on their axes;
to which is added a second catalogue of the comparative
brightness of the stars. 4to. London, 1796
-: *A third catalogue of the comparative brightness of the
stars; with an introductory account of an index to Mr.
Flamsteed's observations of the fixed stars.
4to. London, 1797
: *Observations of the changeable brightness of the satellites
of Jupiter, and of the variation in their apparent magni-
tudes, with a determination of the time of their rotatory
motions on their axes [&c.] 4to. London, 1797
— : *On the discovery of four additional satellites of the Geor-
gium Sidus. The retrograde motion of its old satellites
announced, and the cause of their disappearance at certain
distances from the planet explained. 4to. London, 1798
: *A fourth catalogue of the comparative brightness of the
stars. 4to. London, 1799
: *On the power of penetrating into space by telescopes, with
a comparative determination of the extent of that power in
natural vision, and in telescopes of various sizes and con-
structions. 4to. London, 1800
: *Investigation of the powers of the prismatic colours to
heat and illuminate objects, with remarks that prove the
different refrangibility of radiant heat; to which is added
an inquiry into a method of viewing the Sun advantage-
ously with telescopes of large aperture and high magnifying
powers. 4to. London, 1800
-: *Experiments on the refrangibility of the invisible rays of
the Sun.  4to. London, 1800
: *Experiments on the solar and on the terrestrial rays that
occasion heat; with a comparative view of the laws to
which light and heat are subject
4to. London, 1800
: *Observations tending to investigate the nature of the Sun,
in order to find the causes or symptoms of its variable emission of light and heat; with remarks on the use that
may possibly be drawn from solar observations.  4to. London, 1801
: *Additional observations tending to investigate the sym-
ptoms of the variable emission of the light and heat of the
Sun, with trials to set aside darkening glasses by trans-
mitting the solar rays through liquids. 4to. London, 1801
: *Observations on the two lately discovered celestial bodies
[Ceres and Pallas]. 4to. London, 1802
-: *Catalogue of five hundred new nebulæ, nebulous stars
planetary nebulæ, and clusters of stars; with remarks on
the construction of the heavens.  4to. London, 1802
: *Observations of the transit of Mercury over the disc of the
, or other than the state of th

#### Herschel (William)-continued. Sun; to which is added an investigation of the causes which often prevent the proper action of mirrors. 4to. London, 1803 ---: \*Account of the changes that have happened, during the last twenty-five years, in the relative situation of double stars, and an investigation of the cause to which they are owing. 4to. London, 1803 -: \*Continuation of an account of the changes that have happened in the relative situation of double stars. 4to. London, 1804 ---: \*Experiments for ascertaining how far telescopes will enable us to determine very small angles; . . . . with an application of the result of these experiments to a series of observations on the nature and magnitude of Mr. Harding's lately discovered star Juno]. 4to. London, 1805 —: \*On the direction and velocity of the motion of the Sun and solar system. 4to. London, 1805 --: \*Observations on the singular figure of the planet Saturn, 4to. London, 1805 —: \*On the quantity and velocity of the solar motion. 4to. London, 1806 --: \*Observations and remarks on the figure, the climate, and the atmosphere of Saturn and its ring. 4to. London, 18c6 -: \*Experiments for investigating the cause of the coloured concentric rings, discovered by Sir Isaac Newton, between two object-glasses laid upon one another, 4to, London, 1807 --: \*Observations on the nature of the new celestial body [Vesta] discovered by Dr. Olbers, and of the Comet which was expected to appear last January in its return from the Sun. 4to. London, 1807 —: \*Observations of a Comet, made with a view to investigate its magnitude and the nature of its illumination; to which is added an account of a new irregularity lately perceived in the apparent figure of the planet Saturn. 4to. London, 1808 —: \*Continuation of experiments for investigating the cause of coloured concentric rings; and other appearances of a similar nature, 4to. London, 1809 -: \*Supplement to the first and second part of the paper of experiments for investigating the cause of coloured concentric rings between object-glasses, and other appearances of a 4to. London, 1810 similar nature. -: \*Astronomical observations relating to the construction of the heavens, arranged for the purpose of a critical examina-4to. London, 1811 -: \*Observations of a Comet, with remarks on the construction of its different parts. 4to. London, 1812 —: \*Observations of a second Comet, with remarks on its construction. .tto. London, 1812 —: \*Astronomical observations relating to the sidereal part of the heavens, and its connection with the nebulous part.

4to, London, 1314

Herschel (William)—continued.
: *A series of observations of the satellites of the Georgian planet, including a passage through the node of their orbits, with an introductory account of the telescopic apparatus
that has been used on this occasion. 4to. London, 1815 : *Astronomical observations and experiments tending to investigate the local arrangement of the celestial bodies in space, and to determine the extent and condition of the
milky way.  4to. London, 1817 : *Astronomical observations and experiments selected for the purpose of ascertaining the relative distances of clusters
of stars, and of investigating how far the power of our telescopes may be expected to reach into space.  4to, London, 1818
<ul> <li>: Discoveries, see Pfaff.</li> <li>: Nebulæ (catalogues of), see Auwers.</li> <li>: Variable stars (observations of), see Pickering.</li> </ul>
: Life, see Holden, Wolf.
Herschel (William and Carolina):  ——: *An account of a new Comet. 4to. London, [1786]  ——: *Account of the discovery of a new comet.
4to. London, 1795
*Reduction af Maskelyne's Iagttagelser af smaa stjerner, anstillede i aarene fra 1765 til 1787.
4to. Kjöbenhavn, 1865
Herz (Norbert) und Josef Strobl:  *Reduction des Auwers'schen Fundamental-Cataloges auf die Le Verrier'schen Praecessionscoöfficienten. 4to. Wien, 1883
Hevelius (Johannes):
: Selenographia, sive Lunæ descriptio atque accurata de- lineatio. In quâ simul cæterorum omnium planetarum
nativa facies variæque observationes, præsertim autem
macularum solarium atque Jovialium, tubospicillo acquisitæ, figuris accuratissimè æri incisis, sub aspectum ponun-
tur Addita est lentes expoliendi nova ratio.
fol. Gedani, 1647 ——: Epistolæ IV. I. De observatione deliquii Solis anno 1649 habitâ II. De eclipsi Solis anno 1652 observatâ
III. De motu Lunæ libratorio IV. De utriusque luminaris defectu anui 1654. fol. Gedani, 1654 —: Epistolæ II. Prior, de motu Lunæ libratorio, in certas
tabulas redacto posterior, de utriusque Luminaris defectu anni 1654 fol. Gedani, 1654 — : Dissertatio de nativa Saturni facie, ejusque variis phasibus,
certa periodo redeuntibus; Cui addita est, tam eclipseos solaris anni 1656 observatio, quàm diametri Solis appar- entis accurata dimensio. fol. Gedani, 1656
: Mercurius in Sole visus Gedani anno christiano MDCLXI Cui annexa est Venus in Sole pariter visa anno 1639



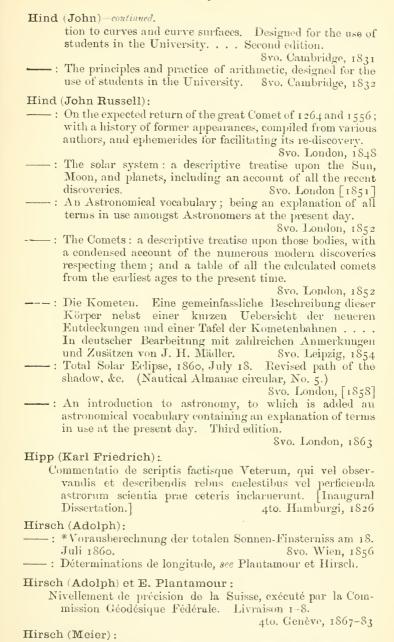
and orthographick projection of the sphere. Third edition.

Heyns (Johann): Versuch einer Betrachtung über die Cometen, die Sündflut und das Vorspiel des jüngsten Gerichts, nach astronomischen Gründen und der heiligen Schrift angestellet, und mit Herrn J. Chr. Gottscheds . . . . Vorrede begleitet.

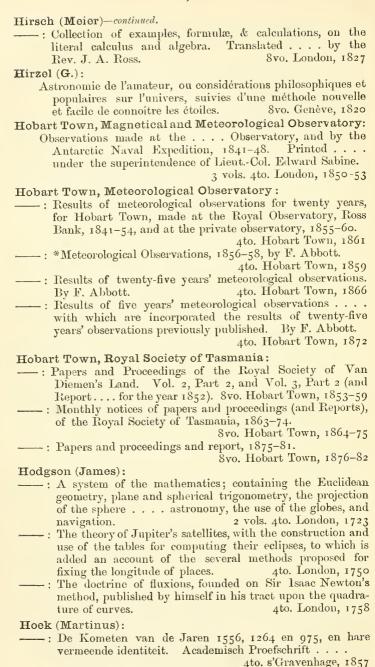
8vo. Berlin und Leipzig, 1742

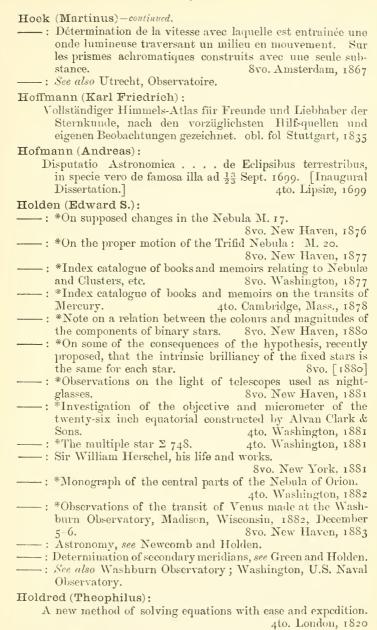
Svo. London, 1725

Hibner (Israel):  Mysterium sigillorum herbarum et lapidum Translate for B. Clayton. 8vo. London, 169
Higgins (W. H.):  The names of the stars and constellations, compiled from the Latin, Greek, and Arabic, with their derivations and meanings.  8vo. Leicester, 188.
Higgins (W. M.):
Researches in the Solar realm. 8vo. London, 1852
Hildreth (S. P.):
*Results of Meteorological Observations made at Marietta Ohio, between 1826 and 1859 inclusive.
4to. Washington, 1866
Hilfiker (Jakob):
Ueber die Bestimmung der Constante der Sonnenparallaxe mit besonderer Berücksichtigung der Oppositionsbeobach tungen. 8vo. Bern, 1878
Hill (George W.):
: Tables of Venus, prepared for the use of the American Ephemeris and Nautical Almanac. 4to. Washington, 187: *Researches in the lunar theory, 1-3.
4to. Baltimore, [1878] ——: On the part of the motion of the lunar perigee which is a function of the mean motions of the Sun and Moon.
4to. Cambridge [U.S.], 1877  : On the development of the perturbative function in periods
series. 8vo: On Gauss's method of computing secular perturbations
(Astronomical papers prepared for the use of the American Nautical Almanac.)  4to. Washington, 188:
Hill (John):
: Urania, or a compleat view of the heavens; containing the antient and modern astronomy, in form of a dictionary.  4to. London, 175.
: Arithmetick, both in the theory and practice, made plain and easy in all the common and useful rules 11th
cdition. 8vo. London, 1772 : A review of the works of the Royal Society of London
containing animadversions on such of the papers as deserved particular observation Second edition.
4to. London, 1786
Hind (John):
: The elements of plane and spherical trigonometry, designed for the use of students in the University. Second edition  8vo. Cambridge, 1828
——: The elements of algebra, designed for the use of students in the University. Second edition. Svo. Cambridge, 1830
: Ditto, fourth edition. Svo. Cambridge, 1839
: The principles of the differential calculus, with its applica-



— : Integraltafeln, oder Sammlung von Integralformeln.
4to. Berlin, 1810





Holetschek (Johann):

\*Bahnbestimmung des ersten Kometen vom Jahre 1871
[2 parts].

8vo. Wien, 1873-74

Holfelder (Georg):

De Sole, omnium siderum inerrantium & planetarum maximo ac splendidissimo laminari . . . Tractatus theologicus & philosophicus.

8vo. Noriberga, 1612

Holland (James):

The Herschelian; or companion to the telescope. [Part 1.] fol. London, 1831

Holliday (Francis):

An introduction to fluxions, designed for the use, and adapted to the capacities of beginners.

8vo. London, 1777

Hollis (Henry William):

The Astronomical Almanac for 1873-74.

8vo. London and Newcastle, Staffordshire, 1873-74

Holmboe (C. A.):

Ezechiels Syner og Chaldæernes Astrolab. Universitets-Program.

4to. Christiania, 1866

Holmgren (F.):

De la cécité des couleurs. Svo. Stockholm, 1878

Holtzapffel (Charles):

A new system of scales of equal parts, applicable to various purposes of engineering, architectural and general science. 8vo. London, 1838

Holwell (John):

Catastrophe Mundi; or Europe's many mutations until the year 1710 . . . . also an ephemeris of all the comets that have appeared from the year . . . 1603 to . . . . 1682.

4to. London, 1682

Hombresoy:

La répulsion universelle.

8vo. Paris, 1872

Hong Kong Observatory:

—: Report on a determination of latitude at Mount Elgin, in the Kau-lung Peninsula, by Major H. S. Palmer.

fol. Hong Kong, 1882

--: Report of the Government Astronomer, 1883.

fol. Hong Kong, 1883

Honorius Augustudunensis [Gallus]:

Mundi synopsis, sive de Imagine Mundi, libri tres.

Svo. Spiræ, 1583

Hooke (Robert):

——: Animadversions on the first part of the Machina Coelestis of the honourable, learned, and deservedly famous astronomer Johannes Hevelius . . . together with an explication of some instruments made by R . . . . H . . . .

4to. London, 1674

: An attempt to prove the motion of the earth from observations.

4to. London, 1674

----: Lampas; or descriptions of some mechanical improvements of lamps & waterpoises, together with some other physical and mechanical discoveries.

4to. London, 1677

---: A description of helioscopes and some other instruments.

## Hooke (Robert) - continued.

(Appendix concerning the eclipse of the moon, observed in London Jan. 1, 167<sup>4</sup>/<sub>5</sub>.) 4to, London, 1676

---: Lectures de potentia restitutiva, or of spring, explaining the power of springing bodies: to which are added some collections.

4to. London, 1678

---: Lectures and collections. I. Cometa [&c.] II. Microscopium. 4to. London, 1678

——: Posthumous works . . . . containing his Cutlerian Lectures and other discourses . . . I. The present deficiency of natural philosophy . . . II. The nature, motion, and effects of light . . . III. An hypothetical explication of memory . . . IV . . . Gravity, magnetism, &c. V. Earthquakes . . . VI. . . Navigation and astronomy . . . .; to these discourses is prefixt the author's life. Publish'd by Richard Wallis. fol. London, 1705

—: Philosophical Experiments and Observations of the late eminent Dr. R. . . . . H. . . . , and other eminent virtuoso's in his Time. Published by W. Derham. Svo. London, 1726

### Hooper (W.):

Rational recreations, in which the principles of numbers and natural philosophy are clearly and copiously elucidated by . . . . experiments. 4 vols. 8vo. London, 1774

## Hopkins (Evan):

—: On the connexion of Geology with terrestrial magnetism.

8vo. London, 1844

- —: Ditto, third edition. Svo. London, 1855
- ——: \*On the optical illusions of the Atmospheric Lens, and its effects on celestial bodies.

  Svo. London, 1855

#### Hopkins (W.):

- ——: Elements of trigonometry. (Library of Useful Knowledge.) 8vo. London, 1833
- ——: \*On the causes which may have produced changes in the Earth's superficial temperature. Svo. London, 1852

## Hopton (Arthur):

A concordancy of yeares, containing a new, easie, and most exact computation of time, according to the English account: also the use of the English and Roman kalender, with briefe notes, rules and tables.

8vo. London, 1616

# Horne (George), Bishop of Norwich:

A fair, candid, and impartial state of the case between Sir Isaac Newton and Mr. Hutchinson; in which is shewn how far a system of physics is capable of mathematical demonstration, how far Sir Isaac's, as such a system, has that demonstration, and consequently what regard Mr. Hutchinson's claim may deserve to have paid it.

Svo. Oxford, 1753

#### Horner(-):

— : Méthode facile et générale pour calculer les latitudes d'un lieu par les hauteurs de l'étoile polaire. 8vo. Gênes, 1822

Horner ( - )—continued.
— : Mémoire sur la réduction des distances lunaires.
8vo. Gênes, 1822
: A short and easy method for correcting the apparent dis-
tances of the Moon from the Sun or a fixed star.
8vo. Genoa, 1822
Hornstein (Karl):
: *Bestimmung der Bahn des ersten Kometen vom Jahre
1847. 8vo. Wien, 1854
: *Bestimmung der Bahn des ersten Kometen vom Jahre
1853. 8vo. Wien, 1854
- : *Opposition der Calliope im Jahre 1856. 8vo. Wien, 1855
: *Über die Bahn der Calliope. 2 parts, 8vo. Wien, 1855
: *Über die neuesten Fortschritte der Astronomie.
8vo. Wien, 1857
—: Über die Bahn der Calliope und ihre Opposition im Jahre
- : Uper die Dann der Camppe und ihre Opposition im Jame
1859. 8vo. Wien, 1857
: *Beobachtungen von Cometen am Refractor in den Jahren
1853 bis 1857. 8vo. Wien, 1858
: Die Asteroiden. Ein Vortrag. 8vo. Wien, 1858
-: *Über die Bahn des Hind'schen Cometen vom Jahre
- TTTI 0
1847. 8vo. Wien, 1870
: *Über die Abhängigkeit des Erdmagnetismus von der
Rotation der Sonne. 8vo. Wien, 1871
-: *Über den Einfluss der Electricität der Sonne auf den
Barometerstand. 8vo. Wien, 1872
- : *Über die Abhängigkeit der täglichen Variation des Baro-
meterstandes von der Rotation der Sonne. 8vo. Wien, 1873
: *Über die wahrscheinliche Abhängigkeit des Windes von
den Perioden der Sonnenflecke. 8vo. Wien, 1877
Horological Journal. Vol. 1-26. 8vo. London, 1858-84
Horoscope (the), edited by Zadkiel. Nos. 1-19.
8vo. Liverpool, 1834
Horrebow (Petrus):
Basis astronomiæ, sive astronomiæ pars mechanica, in qua
describuntur observatoria atque instrumenta astronomica
Ræmeriana Danica, simulque eorundem usus, sive methodi
observandi Ræmerianæ tridui observationum Tus-
culanarum Roemeri ex fundamentis exponuntur.
4to. Havniæ, 1735
Horrox, or Horrocks (Jeremiah):
: Opera Posthuma; viz. Astronomia Kepleriana defensa &
promota; Excerpta ex epistolis ad Crabtræum suum; Ob-
servationum cœlestium Catalogus; Lunæ Theoria nova.
Accedunt Gulielmi Crabtræi observationes cœlestes; in calce
adjiciuntur J. Flamstedii de temporis æquatione diatriba;
numeri ad Lunæ Theoriam Horroccianam.
4to. Londini, 1673
4to. Londini, 1673

Houzeau (Jean C.)—continued.
: *Méthode pour déterminer simultanément la latitude, la longitude, l'heure et l'azimut, par des passages observés dans
deux verticaux. 4to. Bruxelles [1853]: *Méthode pour mesurer la parallaxe horizontale des Astres.
8vo. Bruxelles, 1862  Catalogue des ouvrages d'astronomie et de météorologie qui se trouvent dans les principales bibliothèques de la
Belgique, préparé et mis en ordre à l'Observatoire Royal de Bruxelles.  8vo. Bruxelles, 1878
— : Uranométrie générale, avec une étude sur la distribution des étoiles visibles à l'œil nu. 4to. Bruxelles, 1878
— : Répertoire des constantes de l'astronomie. 4to. Bruxelles, 1878
: Atlas de toutes les étoiles visibles à l'œil nu, formé d'après observation directe, dans les deux hémisphères.
fol. Mons, 1878  Vade-mecum de l'Astronome.  fol. Mons, 1878  8vo. Bruxelles, 1882
Houzeau (J. C.) et A. Lancaster:  Bibliographie générale de l'Astronomie, ou Catalogue méthodique des ouvrages, des mémoires et des observations astronomiques publiés depuis l'origine de l'imprimerie jusqu'en 1880. Tome 2: mémoires et notices insérés dans les collections académiques et les revues. 8vo. Bruxelles, 1880-83
Howard (Edward):  Copernicans of all sorts convicted, by proving that the earth hath no diurnal or annual motion To which is annex'd a treatise of the Magnet. Svo. London, 1705
Howard (John):  A treatise on spherical geometry, containing its fundamental properties; the doctrine of its loci; the maxima and minima of spherical lines and areas.  8vo. Newcastle upon Tyne, 1798
Howard (Luke):  Barometrographia: the variations of the barometer in the climate of Britain, exhibited in autographic curves, with the attendant winds and weather. 1815–35 [with 2 appendices].  fol. and 4to. London, 1854–50
Howe (Alexander Hamilton):  A theoretical inquiry into the physical cause of epidemic diseases, accompanied with tables.  8vo. London, 1865
Howe (H. A.): : *Three approximate solutions of Kepler's problem.  8vo, Cincinnati
——: Double Stars, see Cincinnati Observatory.
Hoynovius (Michael) et Jacob Horn:  Dissertatio astronomica de descensu Solis ad terram. [Inaugural Dissertation.] 4to. [Königsberg], 1687

### Huber (Gottlieb): Anwendung der conformen Abbildung. Inaugural-Disserta-Svo. Zürich, 1883 Huber (Johannes): Zur Philosophie der Astronomie. 4to. München, 1878 Hues (Robert): Tractatus de globis, cœlesti et terrestri, eorumque usu, primum conscriptus & editus à R . . . H . . . , semelque atque iterum à J. Hondio excusus, & nunc . . . . auctus operâ ac studio J. I. Pontani. 4to. Amstelodami, 1617 Huggins (William): ---: On the results of spectrum analysis applied to the heavenly bodies. A Discourse delivered at Nottingham . . . . August 24, 1866. Svo. London, 1866 - : Ergebnisse der Spectral-Analyse in Anwendung auf die Himmelskörper . . . . Deutsch, mit Zusätzen, von W. Klinkerfues. Svo. Leipzig, 1868 ---: \*On the photographic spectra of stars. 4to. London, 1880 Hugo (Léopold): ---: Le Valhalla des sciences pures et appliquées. Svo. Paris, 1875 ---: \*Extrait de deux lettres adressées à D. B. Boncompagni. 4to. Roma [1875] - : Astronomie géométrique, ou brèves considérations sur la nouvelle théorie des ovhélites. Svo. Paris, 1876 Hulsius (Levinus): Tractatus primus (secundus et tertius) Instrumentorum mechanicorum . . . . 3 parts in 1 vol. 4to. Francofurti ad Moenum, 1605 Humboldt (Friedrich Heinrich Alexander von): ---: Lettre . . . . au Duc de Sussex . . . . sur les moyens propres à perfectionner la connoissance du magnétisme terrestre par l'établissement de stations magnétiques. 4to. [Berlin, 1836] Report on ditto, by S. H. Christie and G. B. Airy. 8vo. [London, 1836] —: Cosmos: a sketch of a physical description of the Universe. . . . . Translated by E. C. Otté. 2 vols. 8vo. New York, 1850 - : Ditto, translated from the German by E. C. Otté (B. H. Paul and W. S. Dallas). 5 vols. 8vo. London, 1871-78, 1876 Humboldt (Friedrich Heinrich Alexander von) et Aimé Bonpland: -: Voyage, . . . . quatrième partie : Recueil d'observations astronomiques, d'opérations trigonométriques, et de mesures barométriques . . . rédigées et calculées . . . . par Jabbo Oltmanns. 2 vols. 4to. Paris, 1810 —: Personal narrative of travels to the equinoctial regions of the new continent, during the years 1799-1804 . . . .

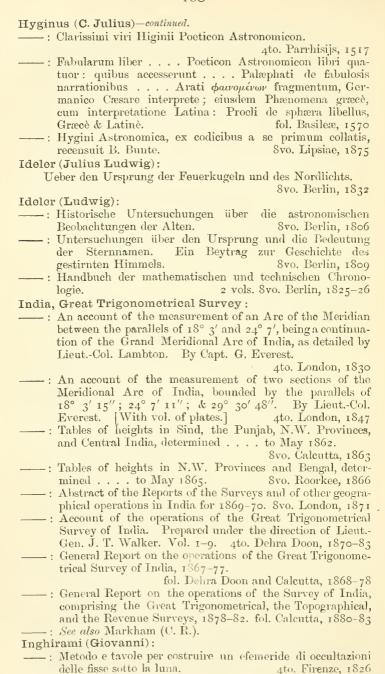
Translated . . . . by Ellen Maria Williams. Vol. 1-6,

Part. I.

Svo. London, 1814 26

--: Key, by D. Dowling. 8vo. London, 1818 and 1824

Hutton (Charles)—continued.
: Mathematical tables, containing the common, hyperbolic,
and logistic logarithms; also sines, tangents, secants &
versed sines both natural and logarithmic Fourth
edition. 8vo. London, 1804
—: Ditto, fifth edition. Syo London 1811
—: Ditto, with seven additional tables of trigonometrical
formulæ, by Olinthus Gregory Twelfth edition.
8vo. London, 1855
: Tracts on mathematical and philosophical subjects, com-
prising, among numerous important articles, the theory of
bridges; also the results of numerous experiments
on the force of gunpowder. 3 vols. 8vo. London, 1812
- : A philosophical and mathematical dictionary, containing an
explanation of the terms, and an account of the several
subjects comprised under the heads mathematics, astro-
nomy, and philosophy both natural and experimental.
2 vols. 4to. London, 1815
—: *A letter to the Marquis De Laplace, on several
astronomical and philosophical subjects. 8vo. London, 1820
: *On the mean density of the earth. 4to. London, 1821
: Life: see Bruce (J.)
Huyghens (Christian):
: Systema Saturnium, sive de causis mirandorum Saturni
phænomenôn, et comite ejus planeta novo.
4to. Hagæ-Comitis, 1659
: Horologium oscillatorium, sive de motu pendulorum ad
horologia aptato demonstrationes geometrica.
fol. Parisiis, 1673
- : The celestial worlds discover'd, or conjectures concerning
the inhabitants, plants and productions of the worlds in
the planets. 8vo. London, 1698
— : Κοσμοθέωρος, sive de terris cœlestibus, earumque ornatu,
conjecture. 4to. Hagæ-Comitum, 1698
— : Ditto, Editio Altera. 4to. Haga-Comitum, 1699
: Opuscula postuma, que continent dioptricam, commentarios
de vitris figurandis : dissertationem de corona & parheliis :
tractatum de motu; de vi centrifuga; descriptionem automati planetarii. 4to. Lugduni Batavorum, 1703
-: Opera varia. (Tomus primus, opera mechanica. Tomus
secundus, opera geometrica. Tomus tertius, opera astro-
nomica. Tomus quartus, opera miscellanea.)
4 vols. in 1, 4to. Lugduni Batavorum, 1724
-: Christiani Hugenii, aliorumque seculi xvII virorum cele-
brium exercitationes mathematica et philosophica
Edidit Petrus Joannes Uylenbroek. Fasciculus 1-2.
4to. Hage Comitum, 1833
Hyginus (C. Julius):
: Clarissimi viri Hyginii Poeticon Astronomicon.
— : Clarissimi viri Hyginii Poeticon Astronomicon. 4to. Venetiis (Thomas de Blavis de Alexandria), 1.488
4to. Venetiis (Thomas de Blavis do Alexandria), 1488 —: Clarissimi viri Higinij Poeticon Astronomicon.



Inghirami (Giovanni)-continued.

— : Mappa Uranografica rappresentante la porzione dell' ora xvIII compresa fra i paralleli xv° boreale et xv° australe . . . . presentata alla reale Accademia delle Scienze di Berlino [e catalogo delle stelle]. fol. Firenze, 1829

— : Life : see Scarpellini.

Inglefield (E. A.):

A new theory of the physical causes of Terrestrial Magnetism, and some remarks in connection therewith on the Aurora Borealis.

8vo. London, 1851

Ingram (Alexander):

A concise system of mensuration, adapted to the use of schools.

12mo. Edinburgh, 1822

Inman (James):

Nautical tables, designed for the use of British seamen . . . . New edition. Svo. London, 1856

Innes (George):

\*On the great solar eclipse which will take place on the 17th July, 1833, being the principal results of a calculation for Edinburgh Observatory.
 Tide Tables for 1834-42, showing at sight the true times

---- : Tide Tables for 1834-42, showing at sight the true times of high water at Aberdeen, Dundee, Leith & London.

12mo. Aberdeen.

---: \*Meteorological Observations made at Aberdeen, 1837-41. 8vo. and 4to. Aberdeen.

Intellectual Observer: Review of Natural History, microscopic research, and recreative science. Vol. 1-12.

8vo. London, 1862-68

Continued to 1871 under the title of The Student and Intellectual Observer.

International Polar Commission:

Mittheilungen der internationalen Polar-Commission. Heft r-5. 8vo. St. Petersburg, 1882-84

International Scientist's Directory . . . . Compiled by S. E. Cassino. 8vo. Boston, U.S.A., 1883

International Standard (the), a magazine devoted to the preservation and perfection of the Anglo-Saxon weights and measures, and the discussion and dissemination of the wisdom contained in the great pyramid of Jeezeh in Egypt. Vol. 1, No. 4. 8vo. Cleveland and Boston, 1883

Inwards (Richard):

Weather Lore; a collection of proverbs, sayings, and rules concerning the weather. 8vo. London, 1869

[Italian Eclipse Commission]:

Rapporti sulle osservazioni dell' ecclisse totale di Sole del 22 Dicembre 1870 eseguite in Sicilia dalla commissione Italiana. 4to. Palermo, 1872

Italy, Associazione Meteorologica Italiana:

---: Atti della prima riunione meteorologica Italiana.

8vo. Torino, 1881

Italy, Associazione Meteorologica Italiana—continued. ——: I. Assemblea Generale nella Città di Napoli, 1882.  Svo. Napoli, 1882
: See Moncalierli, R. Collegio Carlo Alberto.
Italy, Riunione degli Scienziati Italiani: Atti della prima riunione tenuta in Pisa, 1839. 4to. Pisa, 1840
Itinerary Instructor (the), No. 1-8. 8vo. London, 1861
<ul> <li>*A method of ascertaining the number of figures that are exact, in the value of a root of an algebraick equation that has been obtained by Mr. Raphson's method of approximation [from Maseres's Scriptores Logarithmici].</li> <li>4to.</li> </ul>
Jack (Richard):
Elements of conic sections, in three books.
8vo. Edinburgh, 1742
[Jackson (J. R.)]:
Commentary notes on the first two chapters of the 'Vestiges of the natural history of creation.' 8vo. London, 1845
Jacob (William Stephen):
: A few more words on the plurality of worlds.  8vo. London, 1855
: See also Madras, Observatory.
Jacobi (Hermann):
De astrologiae Indicae 'Horâ' appellatae originibus. [Inau-
gural Dissertation.] 8vo. Bonnae, 1872
Jacoli (Ferdinando):
*Intorno a due scritti di Raffaele Gualterotti Fiorentino, re-
lativi alla apparizione di una nuova stella avvenuta nell'
anno 1604. 4to. Roma, 1875
Jahn (Gustav Adolph):
: Practische Astronomie, oder Beschreibung und Gebrauch der vorzüglichsten astronomischen Instrumente und Tafeln.
2 vols. in 1, 8vo. Berlin, 1834–35
- : Die grosse Sonnenfinsterniss am 15. Mai 1836 central und
ringförmig in ihren verschiedenen und merkwürdigen Umständen ausführlich beschrieben. 8vo. Leipzig, 1836
: Populäre Sternkunde, oder leichtfassliche und unterhaltende
Darstellung der Wunder des gestirnten Himmels. Nebst
einem Anhange über das Wesentlichste des Kalenders und
der Witterungslehre. 8vo. Leipzig, 1843
— : Geschichte der Astronomie vom Anfange des neunzehnten Jahrhunderts bis zu Ende des Jahres 1842.
2 vols. 8vo. Leipzig, 1844
: Ueber den neuen Planeten Asträa und den Biela'schen
Kometen. 8vo. Leipzig, 1846
: Verzeichniss aller bis zum Jahre 1847 berechneten Kometen-
bahnen. obl. fol. Leipzig, 1847: Populäre Astrognosie oder leichtfassliche Anleitung zur
Kenntniss des gestirnten Himmels 8vo Leinzig 1848

Jahn (Gustav Adolph)—continued. — : Katechismus der Astronomie. 8vo. Leipzig, 1851 ---: Der grosse Komet von 1556 und seine bevorstellende Wiederkehr. 8vo. Leipzig, 1856 Jahrbuch, herausgegeben von H. C. Schumacher, 1836-41, 1843-44. 8vo. Stuttgart, 1836-44 Jahrbuch (Astronomisches), see Berlin; Gruithuisen. Jamaica: Weather Report for the month of April 1883. fol. Kingston, 1883 James (Henry): ---: Instructions for taking meteorological observations, with tables for their correction, and notes on meteorological phenomena. (Ordnance Survey.) 8vo. London, 1860 ---: See also United Kingdom, Ordnance Survey. Jamieson (Alexander): A celestial atlas comprising a systematic display of the heavens in a series of thirty maps . . . . accompanied by catalogues of the stars and astronomical exercises. obl. 4to. London, 1822 Janssen (Jules): ---: \*Rapport sur une mission en Italie, dans les Alpes, et en Grèce . . . . concernant l'étude de plusieurs questions de physique céleste. Svo. Paris, 1868 ---: \*Note sur la photographie de la Comète b 1881, obtenue à l'Observatoire de Meudon. 12mo. Paris [1882] ---: Observations de l'Éclipse totale du 6 Mai 1883 à l'Isle Caroline. 8vo. Salem, Mass., 1883 Janvier (Antide): Des révolutions des corps célestes par le mécanisme des 4to. Paris, 1812 rouages. Java: —: Die Triangulation von Java, ausgeführt vom Personal des Geographischen Dienstes in Niederländisch Ost-Indien, von J. A. C. Oudemans, E. Metzger und C. Woldringh. Abtheilung 1, 2. 4to. Batavia und Haag, 1875-78 — : See also Oudemans (J. A. C.). Jeanjaquet (Eugène): Phénomènes célestes résultant de la transmission successive de 8vo. Neuchatel, 1859 la Lumière. Jeans (George): Practical Astronomy for the unlearned. 8vo. London, 1856 Jelinek (C.):

Jentzsch (Hermann Theodor):
Theorie der Astroiden; einer neuen Classe von Curven. [Inaugural-Dissertation.]

8vo. Greifswald, 1860

4to. Prag, 1848

- : \*Bahnbestimmung des von de Vico am 24. Januar 1846 ent-

deckten Cometen.

-: See also Vienna, K.K. Sternwarte.

## Jerwood (James):

—: A lecture on the new planet Neptune and its discovery.

8vo. Exeter, 1849—: \*On the longitude of places, and on the application of the

- electric telegraph to determine it. 8vo. Exeter, 1867

  ---: \*On the application of the calculus of probabilities to legal
- ----: \*On the application of the calculus of probabilities to legal and judicial subjects. 8vo. Exeter, 1868

## Johnson (Edward John):

Practical illustrations of the necessity for ascertaining the deviations of the compass.

4to. London, 1847

### Johnson (Manuel John):

— : Astronomical Observations made at the Honorable East India Company's Observatory, St. Helena, 1831.

4to. St. Helena, 1832

——: A catalogue of 606 principal fixed stars in the Southern hemisphere; deduced from observations made at the Observatory, St. Helena, 1829, 1833. 4to. London, 1835

---: See also Oxford, Radcliffe Observatory.

### Johnson (Richard Coward):

\*Description of observatory at Higher Bebington, Cheshire. 8vo. Manchester, 1878

### Johnson (Samuel J.):

Eclipses, past and future; with general hints for observing the heavens.

8vo. Oxford, 1874

## Jolly (Ph.):

Das Leben Fraunhofer's. Rede an die Studirenden der k. Ludwig-Maximilians-Universität zu München.

8vo. München, 1865

### Jones (George):

Observations on the Zodiacal light, from April 2, 1853, to April 22, 1855 . . . . with conclusions from the data thus obtained. (United States Japan Expedition, Vol. 3.)

4to. Washington, 1856

#### Jones (T. Rupert):

Manual of the natural history, geology and physics of Greenland and the neighbouring regions, prepared for the use of the Arctic expedition of 1875 . . . . Edited by T. R . . . . J . . . . . . 8vo. London, 1875

### Jones (William):

- : An essay on the first principles of natural philosophy . . . .

  In four books. 4to, Oxford, 1762
- ---: \*Properties of the conic sections. 4to. London, 1774

## Jordaine (-):

Duodecimal Arithmetick. 4th edition. 8vo. London, 1720

### Jordan (William Leighton):

——: A treatise on the action of Vis Inertiae in the ocean, with remarks on the abstract nature of the forces of vis inertiae and gravitation, and a new theory of the tides.

8vo. London, 1868

Jordan (William Leighton)-continued.

---: The ocean; its tides and currents, and their causes. 8vo. London, 1873 ---: The new principles of natural philosophy. 8vo. London, 1883 Jordanus, see Ptolemy, Planisphærium; Valderus and others. Jost (Ernst): Das Sonnensystem von einem hydrodynamischen Gesichtspunkte betrachtet. [Inaugural Dissertation.] 4to. Berlin, 1874 Journal of Natural Philosophy, Chemistry, and the Arts: - : By William Nicholson. 5 vols. 4to. London, 1797–1802 : Ditto [Second series]. Vol. 1–14, 16–36. 8vo. London, 1802-13 Journal of Science and the Arts. Edited at the Royal Institution of Great Britain. Vol. 1-6. Svo. London, 1816-19 - : The Quarterly Journal of Literature, Science and the Arts. Vol. 7-22. 8vo. London, 1819-27 — : Index to the first twenty volumes. 8vo. London, 1826 ---: The Quarterly Journal of Literature, Science and the Arts (New Series). Jan. 1827 to June 1830. 7 vols. 8vo. London, 1827-30 Journal of Science [continuation of the Quarterly Journal of Science] edited by W. Crookes. Third series. Vol. 1-5. 8vo. London, 1879-83 Juan (Jorge): Exámen marítimo teórico-práctico, ó tratado de mecánica aplicado á la construccion, conocimiento y manejo de los navíos y demas embarcaciones. Edicion segunda, aumentada . . . por Gabriel Ciscár. Tomo 1. 4to. Madrid, 1793 Juan (Jorge) y Antonio de Ulloa: ---: Observaciones astronomicas, y phisicas hechas . . . . en los reynos del Perú . . . . de las quales se deduce la figura y magnitud de la tierra, y se aplica á la navegacion. 4to. Madrid, 1748 - : A voyage to South America . . . translated from the

[&c.].
Julius (Frederik Hendrik):

Berekening van de Loopbaan der Komeet 1863 VI. Academisch Proefschrift. 8vo. Utrecht, 1867

original Spanish. Third edition, to which are added, by Mr. John Adams . . . occasional notes and observations

Junctinus (Franciscus):

Speculum Astrologie, vniversam mathematicam scientiam in certas classes digestam complectens.

2 vols. fol. Lugduni, 1583-81

2 vols. 8vo. London, 1772

Tom. 1. In Ptolemæi Quadripartiti libros comment. De judiciis et revolutionibus nativitatum; Revolutiones annorum muudi.

 Comment, in G. Purbachii theorieæ planetarum liber: Comment, in sphæram J. de Sacrobosco; De stellis fixis; De celipsibus et cometis; Calendarium astrologicum.



Kampf (C. L. F.)-continued.

an den Kreisen des neuen Aequatoreals der Hamburger Sternwarte. Inaugural-Dissertation. Svo. Altona. 1868

Kane (Elisha Kent):

—: \*Astronomical Observations in the Arctic Seas . . . . 1853-55. Reduced and discussed by C. A. Schott.

4to. Washington, 1860

-: \*Tidal Observations in the Arctic seas, 1853-55. Reduced and discussed by C. A. Schott. 4to. Washington, 1860

Kant (Immanuel):

Allgemeine Naturgeschichte und Theorie des Himmels, oder Versuch von der Verfassung und dem mechanischen Ursprunge des ganzen Weltgebäudes nach Newtonischen Grundsätzen abgehandelt. Vierte Auflage. Svo. Zeitz, 1808

Karlinski (Franciscus Michaël):

Hestiae planetae minoris XLVI elementa nova ex observationibus sex oppositionum annorum 1857-1864.

4to. Cracoviae, 1865

Kasan, Observatoire de l'Université Impériale:

Observations astronomiques faites . . . . par (Jean) Simonoff et (M.) Lépounoff. Cahier 1. 4to, Kasan, 1842

Kasan, Université Impériale:

Uchemiya Zapiski (Scientific Notes). 8vo. Kasan, 1864-82

Kästner (Abraham Gotthelf):

- : Astronomische Abhandlungen zur weiteren Ausführung der astronomischen Anfangsgründe. Sammlung 1, 2.

Svo. Göttingen, 1772-74

-: Anfangsgründe der Arithmetik, Geometrie, ebenen und sphärischen Trigonometrie, und Perspectiv. Dritte Auflage. 8vo. Göttingen, 1774

Kater (Henry): Nautical Astronomy, see Encyclopædia Metropolitana.

Kayser (E.):

Resultate aus Beobachtungen von Sonnenflecken während der Jahre 1754-58. 8vo.

Kayser (Heinrich):

Lehrbuch der Spektralanalyse.

8vo. Berlin, 1883

Kegler (Ignatius): Scientia Eclipsium, see Briga.

Keiffenheim (Hugo):

Die absoluten Bewegungen der Himmelskörper und die wahre Natur der Dinge. Svo. Köln, 1868

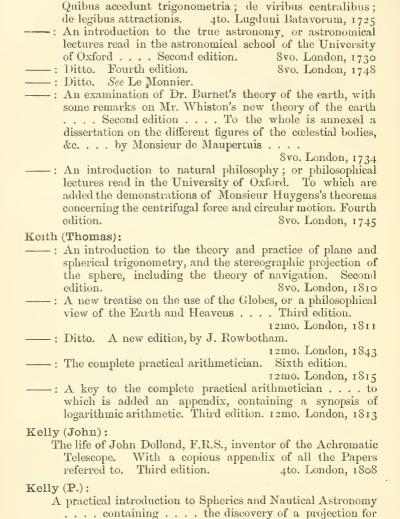
Keill (John):

— : Introductio ad veram physicam, seu lectiones physicae habitæ in schola naturalis philosophiæ Academiæ Oxoniensis An. Dom. 1700 . . . Editio tertia. 8vo. Oxoniæ, 1715

- : Introductio ad veram astronomiam, seu lectiones astronomica habita in schola astronomica academia Oxoniensis. 8vo. Oxonia, 1718

- : Introductiones ad veram physicam et veram astronomiam;

Keill (John)—continued.



Kempf (Johann Christopher):

Theoria gravitatis corporum ac motus planetarum. [Inaugural Dissertation.]

4to. Gissae, 1745

Kempf (Paul):

problem.

Untersuchungen über die Ptolemäische Theorie der Mondbewegung.

8vo. Berlin, 1878

clearing the lunar distances, in order to find the longitude at sea, with a new method of calculating this important

8vo. London, 1796

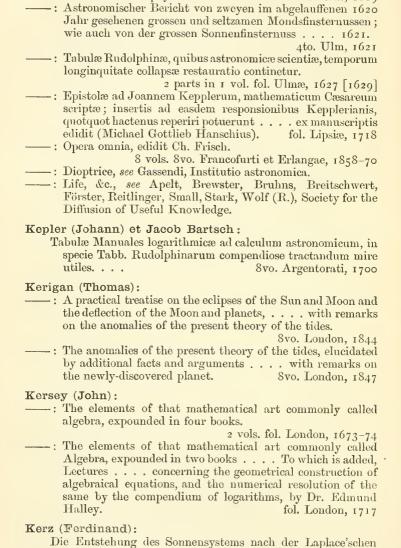
Kendall (E. Otis):  *On the longitude of several places in the United States, as deduced from the Observations of the Solar Eclipse of September 18, 1838.  4to. London [1839]
Kennedy (John): A complete system of astronomical chronology, unfolding the Scriptures.  4to. London, 1762
Kenriek (William):
: An account of the automaton, constructed by Orffyreus. 4to. London, 1770: A lecture on the perpetual motion Part 1 & 2.
4to. London, 1771
[——]: Reasons for offering a parliamentary premium for the discovery of the perpetual motion.  4to. London, 1/1/1
Kepler (Gabriel):
Kurtzer jedoch gründlicher Bericht dess im Christ-Monat Anno 1664 erschienenen, und von verständigen Astrologis allendhalben wargenommen grossen Cometen. 4to. 1665
Kepler (Joannes):
— : Prodromus dissertationum cosmographicarum continens mysterium cosmographicum, de admirabili proportiono orbium cœlestium, deque causis cœlorum numeri, magnitudinis, motuumque periodicorum genuinis & proprijs.  4to. Tubinge, 1506
— : Ad Vitellionem paralipomena, quibus astronomiæ pars optica traditur; potissimùm de artificiosa observatione et æstimatione diametrorum deliquiorumq; Solis & Lunæ.  4to. Francofurti, 1604
— : De Stella nova in pede Serpentarii, et qui sub ejus exortum de novo iniit trigono igneo accesserunt I. De Stella incognita Cygni narratio astronomica. II. De Jesu Christi
Servatoris vero anno natalitio. 4to. Prage, 1606  —: Phenomenon singulare seu Mercurius in Sole. Cum digressione de causis, cur Dionysius Abbas Christianos minus justo à nativitate Christi Domini numerare docucrit:
De capite & anni Ecclesiastici. 4to. Lipsiæ, 1609
: Astronomia nova αἰτιολόγητος, seu physica coelestis, tradita
commentariis de motibus stellæ Martis ex observationibus
G. V. Tychonis Brahe. fol. Pragae, 1609
-: Ephemerides novæ motuum celestium, ab anno vulgaris
erre M.DCXVII (ad annum MDCXX). Ex observationibus
potissimum Tychonis Brahei, hypothesibus physicis &
Tabulia Dudalphinia eta Lincii Anatoin I. Carl
Tabulis Rudolphinis. 4to. Lincij Austria [1617]
: Epitome astronomiæ Copernicanæ usitatâ formâ quæstionum
& responsionum conscripta, inq; VII. libros digesta, quorum
tres hi priores sunt de doctrina sphærica.
8vo. Lentijs ad Danubium, 1618
—: Ditto. Svo. Francofurti, 1635
- : Harmonices mundi libri V., quorum primus Geometricus,
secundus Architectonicus, tertius Harmonicus, quartus

Metaphysicus, psychologicus et astrologicus, quintus Astro-

fol. Lincii Austriæ, 1610

Kepler (Joannes)—continued.

nomicus et metaphysicus.

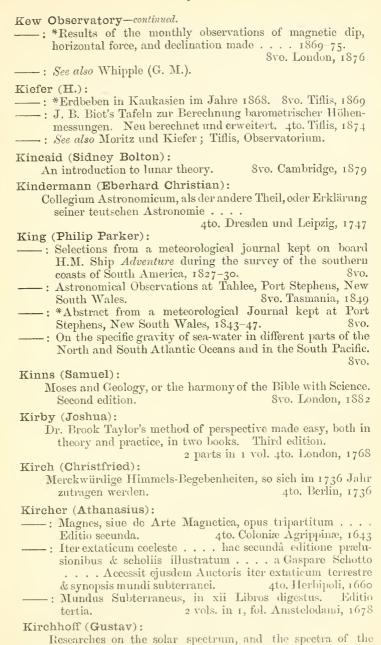


---: \*Report of the Kew Committee, 1872-73, 1875-83.

8vo. London, 1872-83

Kew Observatory:

Hypothese, in verschiedenen neuen Richtungen ausgeführt. Eine mathematische Abhandlung. 8vo. Darmstadt, 1875



chemical elements. Translated by II. E. Roscoe.
2 parts, 4to. Cambridge, 1862-63

Kirkby (John):
Arithmetical institutions, containing a compleat system of
arithmetic, natural, logarithmical, and algebraical in al
their branches. 4to. London, 1735
Kirkwood (Daniel):
: Meteoric Astronomy: a treatise on shooting-stars, fire-balls
and aerolites. 8vo. Philadelphia, 1867
: *On Comets and Meteors. 8vo. Philadelphia, 1869
—: Comets and Meteors: their phenomena in all ages; their
mutual relations; and the theory of their origin.
8vo. Philadelphia, 1873
-: *On eight Meteoric Fireballs seen in the United States
from July, 1876, to February, 1877. 8vo. Philadelphia, 1877: *On Meteoric Fireballs seen in the United States during
the year ending March 31, 1879. 8vo. Philadelphia, 1879
Kirschner (J. A.):
Ueber die Bahn der Himmelskörper.
8vo. Halle und Leipzig, 1820
Kitchiner (William):
[]: A companion to the telescope
[——]: A companion to the telescope. 12mo. London, 1811——: Practical observations on telescopes. 12mo. London, 1815——: Practical observations on telescopes, opera-glasses and
—: Practical observations on telescopes, opera-glasses and
spectacles Third edition. 12mo. London, 1818
spectacles Third edition.  12mo. London, 1818  1818  12mo. London, 1818
the results of thirty years' experiments with fifty-one
telescopes of from one to nine inches in diameter.
12mo. London, 1825
Klausing (Heinrich):
Eclipsis Lunaris nuper visa et observata Wittenbergae anno
MDCCXVIII die ix Septembr. in qua Singularia ejusdem
Eclipseos notantur solidisque Fundamentis superstruuntur.
4to. Wittenbergae, 1719 Kleiber (Joseph A.):
Astronomical theory of shooting stars [in Russian].
8vo. St. Petersburg, 1884
Klein (Hermann J.):
- : Entwickelungsgeschichte des Kosmos nach dem gegen-
wärtigen Standpunkte der gesammten Naturwissenschaften.
Mit wissenschaftlichen Anmerkungen.
8vo. Braunschweig, 1870
-: Handbuch der allgemeinen Himmelsbeschreibung vom
Standpunkte der kosmischen Weltanschauung.
2 vols. 8vo. Braunschweig, 1871–72
I, Das Sonnensystem. Zweite verbesserte Auflage.  2. Der Fixsternhimmel.
- : Populäre astronomische Encyclopädie. Astronomisches
Handwörterbuch; nebst biographischen Notizen
über die hierbei erwähnten Forscher. 8vo. Heilbronn, 1874
- : Anleitung zur Durchmusterung des Himmels. Astrono-
mische Objecte für gewöhnliche Telescope. Ein Hand- und
Hülfsbuch für alle Freunde der Himmelskunde, besonders
für die Besitzer von Fernrohren. 8vo. Braunschweig, 1880

### Klinkerfues (Wilhelm):

- : Über eine neue Methode die Bahnen der Doppelsterne zu berechnen. Inaugural-Dissertation. 4to. Göttingen, 1855

—: Die Aberration der Fixsterne nach der Wellentheorie.

8vo. Leipzig, 1867

---: Theoretische Astronomie. Svo. Braunschweig, 1871

-----: Theorie des Bifilar-Hygrometers mit gleichtheiliger Prozent-Scala. Svo. Göttingen, 1875

----: Ueber die Kometen-Erscheinungen von 371 v. Chr., 1668, 1843 I und 1880 I. 8vo. Göttingen, 1880

### Klöden (K. F.):

Der Sternenhimmel. Eine vollständige populäre Sternenkunde mit besonderer Beziehung auf die grosse Sternwandkarte des Landes-Industrie-Comptoirs. 8vo. Weimar, 1848

### Klüber (Johann Ludwig):

Die Sternwarte zu Mannheim. 4to. Mannheim, 1811

## Klügel (Georg Simon):

Anfangsgründe der Astronomie, nebst der mathematischen Geographie, Schifffahrtskunde, Chronologie und Gnomonik. 8vo. Berlin und Stettin, 1793

### Kluk (V. P.):

Auflösung des Verhältnisses der Quadratur in den Kreis, als eines einzelnen Falles des allgemeinen mathematischen Grundgesetzes in formellen Körpersistemen und Krafteigenheiten der Naturerscheinungen. 8vo. Wien, 1861

## Kluk-Kluczycki (V. P.):

Die Kometen als Trabanten der Planeten, zum Beleg für die gänzliche Reform der Himmels-Mechanik entwickelt.

8vo. Leipzig, 1873

# Klüpfel (Johann Albrecht) et Johann Christian Neuffer:

De atmosphæra solis, atque hinc explicandis caussis macularum solarium. [Inaugural Dissertation.] 4to. Tubingæ, 1746

# Kmeth (Daniel):

\*Lettre . . . à M. le Baron de Zach ; sur une nouvelle Angosiade, ou sur un délit astronomique, commis à l'Observatoire Royal de Bude en Hongrie. 8vo. Gênes, 1823

## Knobel (Edward Ball):

—: \*The chronology of star catalogues. 4to. London, 1877

---: \*Notes on a Persian MS. of Ulugh Beigh's catalogue of stars.

8vo. London, 1879

### Knorre (Karl):

— : Der Ort des Sterns δ Ursae minoris für jeden Tag der Jahre 1823–1830. 4to. Nicolajew, 1824

— : \*Gutachten über das Werk des Herrn Prof. Dr. Sawitsch.
[Practische Astronomie, &c.] 8vo.

### Knorre (Victor):

Additamenta in usum commodiorem et tutiorem methodorum, quae ad orbitas planetarum paucis observationibus determinandas inserviunt. Dissertatio Inauguralis.

4to. Perolini, 1867

Knott (George):

- : \*On the variable star R. Vulpeculæ. 8vo. London, 1867

---: \*Micrometrical measures of double stars. 4to. London, 1877

Knott (George) and Joseph Baxendell:

On the method of observing variable stars. 8vo. London, 1863

Knowledge: an illustrated magazine of Science, plainly worded

-exactly described. Conducted by Richard A. Proctor.

Vol. 1-5.

4to. London, 1882-84

Kobold (H.):

Klinkerfues'sche Constanten zur Reduction auf den scheinbaren Ort für die mittleren Tage 1884, 12<sup>h</sup> mittlere Zeit Berlin. 8vo. Göttingen [1883]

Koch (Georg):

Micrometrische Vermessung des Sternhaufens Herschel 1712. Inaugural-Dissertation. 8vo. Leipzig, 1876

Koch (Julius August):

Astronomische Tafeln zur Bestimmung der Zeit, aus der beobachteten gleichen obwohl unbekannten Höhe zweyer Fixsterne. Svo. Berlin und Stralsund, 1797

Köhler (Heinrich Gottlieb):

Logarithmisch-trigonometrisches Handbuch.

8vo. Leipzig, 1847

Kokides (Demetrius K.):

Kollmann (August Gottlob):

Dissertatio de atmosphaera Lunae. [Inaugural Dissertation.]
4to. Vitembergae, 1734

Königsberg, Königliche Universitäts-Sternwarte:

----: Astronomische Beobachtungen. Abtheilung 1–36. fol. Königsberg, 1815–70

Band I-21 herausg. von F. W. Bessel.

22-30 ,, ,, A. L. Busch. 30-36 ,, ,, E. Luther.

---: Systematisches Verzeichniss der in der Bibliothek . . . . enthaltenen Bücher. 8vo. Königsberg, 1852

--: See also Luther (E.)

Konkoly (Nicolaus von):

——: Beobachtungen angestellt am astrophysicalischen Observatorium in O-Gyalla. Band 1–5. 4to. Halle, 1879–83

----: \*Der neue Refraktor des astrophysikalischen Observatoriums in O-Gyalla. 4to. Leipzig, 1883

— : Praktische Auleitung zur Anstellung astronomischer Beobachtungen, mit besonderer Rücksicht auf die Astrophysik. 8vo. Braunschweig, 1883

Kortazzi (J.):

\*Bestimmung der Längen-Differenz zwischen Pulkowa, Helsingfors, Åbo, Lowisa und Wiborg.

4to. St. Pétersbourg, 1871

195 [Kostrowicki (le Cte.)]: Commentaire et discussion du système planétaire de l'astronome J. Perny Villeneuve. Par un ancien officer de l'Etat-Major. 4to. Vienne, 1861 Kövesligethy (Rudolf von): \*Ueber den Farbenwechsel des Sternes a Ursæ Majoris. 8vo. Cöln, 1882 Kowalski (Marian): ---: \*Recherches sur les mouvements de Neptune, suivies des tables de cette planète. 8vo. Kasan, 1855 ---: \*Sur les lois du mouvement propre des étoiles du catalogue de Bradley. ---: \*Recherches sur la réfraction astronomique. 8vo. Kasan, 1878 Krabbe (Johann): Newes Astrolabium, sampt dessen Nutz und Gebrauch. 4to. Wolfenbüttel, 1525 [1625] A short description of the astronomical clock . . . in the museum at Mentz. ramo. Krahl (Theodor): De orbita cometae tertii MDCCCLIII. Dissertatio inauguralis astronomica. 4to. Vratislaviae, 1867 Kramp (Chrétien): Analyse des réfractions astronomiques et terrestres. 4to. Strasbourg, 1799 Kreil (Karl): \*Versuch, den Einfluss des Mondes auf den atmosphärischen Zustand unserer Erde aus einjährigen Beobachtungen zu erkennen. 4to. Prag [1841] Kremsmünster, Sternwarte: ---: \*Magnetische Beobachtungen . . . im Jahre 1855-56, von 4to. Wien, 1858-61 P. Augustin Reslhuber. ---: Resultate aus den in den Jahren 1857-59, 1868-69 . . . . angestellten meteorologischen Beobachtungen. Von A. Reslhuber. 8vo. Linz, 1858-72 ——: Mittlere Örter von [750] Fixsternen, bezogen auf das mittlere Aequinoctium 1870.0 . . . . von P. G. Strasser. 8vo. Kremsmünster, 1877 ---: See also Reslhuber (A.) Kreutz (Heinrich): Untersuchungen über die Bahn des grossen Kometen von 1861 (1861 II.). Inaugural-Dissertation. 4to. Bonn, 1880 Krueger (Adalbert): — : De ascensionibus rectis a Flamsteedio quadrantis muralis ope observatis. Dissertatio astronomica [inauguralis].

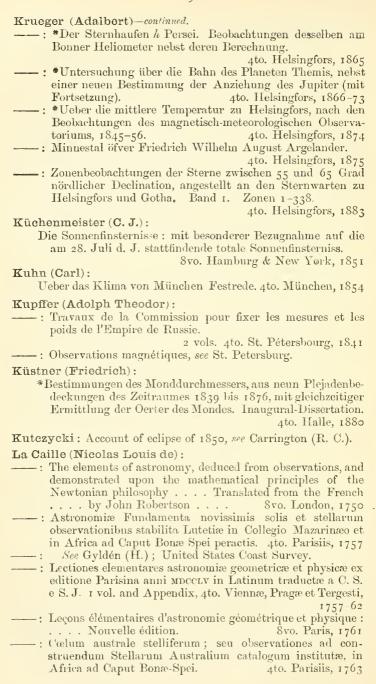
—: \*Ueber die Parallaxe des Sternes Oeltzen No. 17415,6.

—— : \*Ueber die Parallaxe des Sterns LL. 21258.

8vo. Bonnae, 1854

4to. Helsingfors, 1863

4to. Helsingfors, 1863



La Caille (Nicolas Louis de)—continued.
: Leçons élémentaires de méchanique, ou traite abrégé du
mouvement et de l'équilibre Nouvelle édition.
8vo. Paris, 1765
: Leçons élémentaires de mathématiques. Nouvelle édition,
par M. Marie. Svo. Paris, 1770
-: Journal historique du voyage fait au Cap de Bonne-
Espérance. 12mo. Paris, 1776
: A catalogue of 9766 stars in the Southern Hemisphere, for
the beginning of the year 1750, from observations
the beginning of the year 1750, from observations made at the Cape of Good Hope in the years 1751-52.
Reduced at the expense of the British Association.
Svo. London, 1847
: See also Paris, Ephemerides.
La Casa (Don Vittorio de):
Opuscolo analitico di geodesia sublime. 8vo. Vienna, 1824
La Condamine (Charles Maurice de):
Mesure des trois premiers degrés du méridien dans l'hémi-
sphère austral, tirée des observations de Mrs de l'Académie
Royale des Sciences, envoyés par le Roi sous l'Équateur.
4to. Paris, 1751
Lacroix (Silvestre François):
- : Traité du calcul différentiel et du calcul intégral.
Vol. 1 & 2, 4to. Paris, an V, VI (1797–98); Vol. 3
(second edition), 1819
— : Élémens de Géométrie, à l'usage de l'École Centrale des quatre-nations. Neuvième édition. 8vo. Paris, 1811
- : Traité élémentaire d'arithmétique, à l'usage de l'École
Centrale des quatre-nations. Onzième édition. 8vo. Paris, 1811
: Élémens d'Algèbre, à l'usage de l'École Centrale des quatre-
nations. Onzième édition. Svo. Paris, 1815
-: Essais sur l'enseignement en général, et sur celui des
mathématiques en particulier, seconde édition.
8vo. Paris, 1816
: Traité élémentaire du calcul des probabilités.
8vo, Paris, 1816
-: An elementary treatise on the differential and integral
calculus Translated from the French, with an appendix
and notes [by G. Peacock and J. F. W. Herschel].
8vo. Cambridge, 1816
: Traité élémentaire de calcul différentiel et de calcul inté-
gral Troisième édition. 8vo. Paris, 1820
Ladies' Diary, or Woman's Almanack, 1731, 1741-1818.
9 vols. 12mo. London, 1731-1818
Lagrange (Joseph Louis de):
- : *Recherches sur les inégalités des satellites de Jupiter.
4to. Paris, 1766
-: *Recherches sur la manière de former des tables des

Lagrange (Joseph Louis de)—continued.
: *Recherches sur les équations séculaires des mouvemens des
Nœuds, et des inclinations des orbites des planètes.
4to. Paris, 1774
: Méchanique analytique. 4to. Paris, 1788 : Ditto Troisième édition, revue, corrigée et annotée
par J. Bertrand. 2 vols. 4to. Paris, 1853-55
: Théorie des fonctions analytiques, contenant les principes
du calcul différentiel. 4to. Paris, an IX 1799
[—]: Leçons sur le calcul des fonctions. Nouvelle édition.
8vo. Paris, 1806
— : Œuvres, publiées par les soins de J. A. Serret. Tome 1-13. 4to. Paris, 1867-82
La Hire (Philippe de):
: La gnomonique, ou méthodes universelles pour tracer des
horloges solaires, ou cadrans, sur toutes sortes de surfaces.
12mo. Paris, 1698 —: Tabulæ astronomicæ, Ludovici Magni jussu et munificentia
exaratæ et in lucem editæ; in quibus solis, lunæ reliquio-
rumque planetarum motus ex ipsis observationibus
traduntur Adjecta sunt descriptio, constructio & usus
instrumentorum astronomiæ Secunda editio.
4to. Parisiis, 1727
: New elements of conick sections, together with a method for their description on a plane. Translated by Brian Robin-
son. Third edition. 8vo. London, 1729
Lais (Giuseppe):
: Studi sul Barometro aneroide. 8vo. Roma, 1871
: Prolegomeni allo studio delle Burrasche del Clima di
Roma. 4to. Roma, 1873
La Lande (Jos. Jérôme le François de):
: Exposition du calcul astronomique. 8vo. Paris, 1762
- : Astronomie Seconde édition. 3 vols. 4to. Paris, 1771
: Ditto, troisième édition. 3 vols. 4to. Paris, 1792
: Tables astronomiques calculées pour le méridien de Paris, sur les observations les plus exactes, faites jusqu'à l'année
1770 [from 'Astronomie.' Tome 1]. 4to. [Paris, 1771]
: Abrégé d'Astronomie. 8vo. Paris, 1774
: Astronomisches Handbuch, oder die Sternkunst in einem
kurzen Lehrbegriff. 8vo. Leipzig, 1775
A translation of 'Abrégé d'Astronomie.'
: Abrégé de Navigation ; historique, théorique et pratique.
4to. Paris, 1793 : Histoire Céleste française, contenant les observations faites
par plusieurs astronomes français. Tome 1. 4to. Paris, 1801
— : Tafeln zur Reduction der Beobachtungen, see Asten
(F. E. von); Schumacher (H.C.)  ——: Bibliographie astronomique; avec l'histoire de l'Astronomie
depuis 1781 iusau'à 1802. 4to. Paris, 1803
: Tables de logarithmes pour les nombres et pour les sinus.
12mo Paris, 1816

La Lande (Jos. Jérôme le François de)—continued.
- : A catalogue of those stars in the Histoire Céleste française
for which tables of reduction to the epoch 1800 have
been published by Prof. Schumacher. Reduced at the
expense of the British Association under the im-
mediate superintendence of Francis Baily. 8vo. London, 1847
: See Lindhagen (D. G.).
— : Logarithmisch-trigonometrische Tafeln Herausge-
geben von Heinrich Gottlieb Köhler. Dritte Ausgabe.
12mo. Leipzig, 1849
— : Positions moyennes pour l'époque de 1790,0 des étoiles
circompolaires dont les observations ont été publiées par
Jérôme Lalande Par Ivan Fedorenko.
4to. St. Pétersbourg, 1854
—: Tafeln der fünfstelligen Logarithmen. Vierte Ausgabe.
. See also Paris, Ephemerides.
Lambert (Jean Henri):
— : Systême du monde publié par M. Mérian Seconde édition. Svo. Berlin, 1784
: Supplementa tabularum logarithmicarum et trigonome-
tricarum secundum ultima auctoris consilia ampli-
ficata, curante Antonio Felkel. 4to. Olispone, 1798
: The system of the world Translated from the French,
by James Jacque. 8vo. London, 1800
-: *Sur les irrégularités du mouvement de Jupiter et de
Saturne. 4to. Berlin, 1779
Laming (Richard):
*On the primary forces of Electricity. 8vo. London, 1838
Lamont (Johann von):
: Ueber die Nebelflecken. 4to. München, 1837
—: Ueber die Bahn des dritten Saturns-Satelliten. 4to. [1837]
: Ueber das magnetische Observatorium der königlichen
Sternwarte bei München. 4to. München, 1841
: *Darstellung der Temperaturverhältnisse an der Oberfläche
der Erde. 4to. München [1843]
: *Beschreibung der an der Münchener Sternwarte zu den
Beobachtungen verwendeten neuen Instrumente und Ap-
parate. 4to. München, 1851
: Magnetische Ortsbestimmungen an verschiedenen Puncten
des Königreichs Bayern, und an einigen auswärtigen Sta-
tionen. Theil 1, 2. Svo. München, 1854-56
: Magnetische Karten von Deutschland und Bayern.
fol. München, 1854
: Untersuchungen über die Richtung und Stärke des Erd- magnetismus an verschiedenen Puncten des südwestlichen
Europa. 4to. München, 1858
— : Untersuchungen über die Richtung und Stärke des Erd-
magnetismus in Nord-Deutschland, Belgien, Holland,
Dänemark, im Sommer des Jahres 1858 ausgeführt.
4to. München, 1859
: See also Munich, Sternwarte.

200 Lamp (Ernst): Der scheinbare Ort des Polarsterns a Ursae Minoris. Astronomische Dissertation. 8vo. Kiel, 1874 Lamp (Johannes): Neue Berechnung der Parallaxe von 61 Cygni aus den Beobachtungen von Schweizer in Moskau, 1863-1866. Inaugural-Dissertation. 8vo. Kiel, 1883 Lamy (Bernard): Traité de la Grandeur en général, qui comprend l'arithmétique, l'algèbre, l'analyse, et les principes de toutes les Sciences qui ont la Grandeur pour objet. 12mo. Paris, 1680 Lancaster (Albert): - : \*Notes météorologiques. 16mo. Bruxelles ---: Bibliographie astronomique, see Houzeau et Lancaster. Landen (John): — : Mathematical lucubrations; containing new improvements in various branches of the mathematics. 4to. London, 1755 -: A discourse concerning the residual analysis: a new branch of the Algebraic art. 4to. London, 1758 -: Mathematical memoirs respecting a variety of subjects, with an appendix containing tables of theorems for the calculation of fluents. 2 vols. 4to. London, 1780-89 —: Observations on converging series, occasioned by Mr. Clarke's translation of Mr. Lorgna's treatise on the same 4to. London, 1781 Landmann (I.): Practical geometry, for the use of the Royal Military Academy 8vo. London, 1805 at Woolwich. Second edition. Langhansen (Christopher): De Eclipsi Solari, occasione insignis eclipseos anno hoc currente 1715 d. 3 Maji appariture. [Inaugural Disserta-4to. Regiomonti, 1715 tion.] Langley (Samuel P.): --: \*On the minute structure of the solar photosphere. 8vo. New Haven, 1874 ---: \*The Solar Atmosphere, an introduction to an account of researches made at the Allegheny Observatory. 8vo. New Haven, 1875 --: \*On the comparison of certain theories of Solar Structure 8vo. New Haven, 1875 with observation. -: \*A proposed new method in solar spectrum analysis. 8vo. New Haven, 1877 4to. Paris, 1877 ---: \*Nouvelle méthode spectroscopique. ---: \*On the possibility of transit observation without personal 8vo. New Haven, 1877

---: \*Transit of Mercury of May 6th, 1878. Svo New Haven, 1878

8vs. Boston, 1878 8vo. Boston, 1878

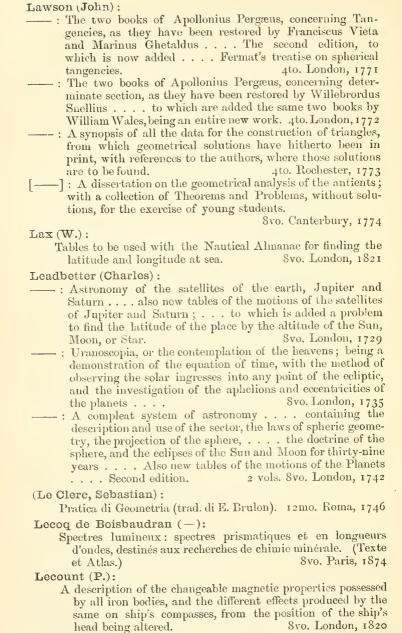
---: \*On certain remarkable groups in the lower spectrum.

---: \*On the temperature of the Sun.

Langley (Samuel P.)—continued.
—: *On the Janssen Solar photograph and optical Studies.
8vo. New Haven, 1878
-: *The total solar eclipse of July 29, 1878. Observations at
Pike's Peak, Colorado. 4to. Washington, 1880
: *Address before the American Association for the
Advancement of Science 1879. [On recent progress
in solar physics.]  8vo. Salem, 1879  *Observations on Mount Etna.  8vo. New Haven, 1880
: *Sur la distribution de l'énergie dans le spectre solaire
normal. 4to. Paris, 1881
: *The Bolometer. 8vo. New York, 1881
: *The Bolometer and radiant energy. 8vo. Cambridge, 1881
—: *Observations du spectre solaire. 4to. Paris, 1882
: *The selective absorption of solar energy.
8vo. New Haven, 1883
: Experimental determination of wave-lengths in the invisible
prismatic spectrum. 8vo. New Haven, 1884
Lansberg (Jacobus):
Apologia pro commentationibus Philippi Lansbergii in motum
terræ diurnum et annuum, adversus Libertum Fromondum.
4to. Middelburgi Zelandiæ, 1633
Lansberg (Philipp van):
- : Bedenckinghen op den daghelijckschen ende Iaerlijckschen
loop vanden Aerdt-cloot. 4to. Middelburgh, 1629
: Commentationes in motum terræ diurnum & annuum, et in
verum adspectabilis cæli typum In Latinum versæ
à Martino Hortensio, unà cum ipsius præfatione.
4to. Middelburghi, 1630
: Uranometriae libri tres; in quibus Lunæ, Solis, & reliquorum
planetarum, & inerrantium stellarum distantiee à terra, &
magnitudinės, hactenus ignoratæ perspicuė demonstrantur. 4to. Middelburgi, 1631
: Tabulae motuum coelestium perpetue, ex omnium tempo-
rum observationibus constructæ, temporumque omnium
observationibus consentientes; item novæ et genuinæ
motuum celestium theorice, & astronomicarum observa-
tionum thesaurus.
3 parts in 1 vol. fol. Middelburgi [Lugduni], 1632
- : Verklaeringhe van het ghebruyck des astronomischen ende
geometrischen quadrants van nieus oversien ende
vermeedert door D. Govbard.
4to. Middelburch [Haerlem], 1633
: Opera omnia.
10 pts. in 1 vol. fol., Middelburgi Zelandiæ, 1635-63
: Astrolabium; dat is verklaringhe van de platte sphære van Ptolomæus, anders astrolabium ghenaemt.
sphære van 1 tolomæus, anders astrolation ghendene.  4to. Middelburgh, 1635
— : Ditto. 4to. Middelburgh, 1653
-: In quadrantem tum astronomicum, tum geometricum; nec
nou in astrolabium introductio. fol. Middelburgi, 1635 [1636]

Lansberg (Philipp van)—continued. ——: Beschrijvingh der vlacke Sonne-Wysers Nieuwelijx
oversien door Jacob Mogge.
fol. Middelburgh, 1675 [Harlemi, 1666]
Lanz (-), et D. E. Bétancourt:
Essai sur la composition des Machines Seconde édition. 4to. Paris, 1819
La Place (Pierre Simon, Marquis de):
: Théorie du mouvement et de la figure elliptique des planètes. 4to. Paris, 1784
Traité de Mécanique céleste.
5 vols. 4to. Paris, an VII [1799]-1825
— : Supplément à la théorie de l'action capillaire (2 <sup>me</sup> Supplément au livre X, et Suppl. au 3me. Vol. de la Méc. Cel.).
4to Paris 1807
— : The system of the world translated from the French
by J. Pond. 2 vois. 8vo. London, 1809
- : Exposition du système du monde quatrième édition,
revue et augmentée par l'auteur. 2 vols. 8vo. Paris, 1813
: A treatise upon analytical mechanics: being the first book of the Méchanique Céleste translated and elucidated
with explanatory notes by the Rev. John Toplis.
8vo. Nottingham, 1814
— : Théorie analytique des probabilités Seconde édition.
4to. Paris, 1814 ——: Ditto, troisième édition. 4to. Paris, 1820
: Ditto, troisième édition. 4to. Paris, 1820 : Essai philosophique sur les probabilités Troisième
édition 8vo. Paris, 1816
: Précis de l'Histoire de l'Astronomie. 8vo. Paris, 1821
- : Mécanique céleste Translated, with a commentary,
by Nathaniel Bowditch (with a memoir of the translator by his son, N. I. Bowditch). 4 vols. 4to. Boston, 1829–39
: Œuvres complètes publices sous les auspices de
l'Académie des Sciences par MM. les Secretaires perpetuels.
Tome 1-5. 4to. Paris, 1878-82
: Mécanique Céleste, see Biot (J. B.); Young (T.).
: Memoir, see Poisson (S. D.); Biot (J. B.).
Lardner (Dionysius):
: A system of algebraic geometry In two volumes.  Vol. 1, containing the geometry of plane curves.
8vo. London, 1823
- : An elementary treatise on the differential and integral
calculus. 8vo. London, 1825
: An analytical treatise on plane and spherical trigonometry,
and the analysis of angular sections. 8vo. London, 1826 : A discourse on the advantages of natural philosophy and
astronomy, as part of a general and professional education.
8vo. London, 1829
- : Popular astronomy from 'the Museum of Science
and Art.' 8vo. London, 1856
' LUITO COCONO SOURCE OVO. LOUIUUII, 1057

Lardner (Dionysius)—continued.	
-: Handbook of Astronomy. 2 vols. 8vo. London, 1853-	56
: Ditto, fourth edition, revised and edited by Edw	in
Dunkin. 8vo. London, 18	
Largeteau (G. L.):	
*Tables de précession, d'aberration et de nutation pour	6=
étoiles principales. Svo. Paris, 18	23
Lartigue (H.):	55
	,
Exposition du système des vents, ou traité du mouvement	de
l'air. Deuxième édition. Svo. Paris, 18	55
Lassell (William):	
*On polishing the specula of reflecting telescopes.	
4to. London, 18	74
Laughton (John Knox):	17
—: Physical Geography in its relation to the prevailing win	ods
and currents. Svo. London, 18	
: An introduction to the practical and theoretical study	10
	72
Laugier (Paul Auguste Ernest):	
: *Mémoire sur l'influence du ressort de suspension sur	la
durée des oscillations du pendule. 4to. Paris, 18.	45
: *Mémoire sur quelques comètes anciennes. 4to. Paris, 18.	16
: Usage du cercle méridien portatif pour la détermination	
des positions géographiques. 4to. Paris, 18	52
- : *Mémoire sur la détermination des distances polaires d	lac
étoiles fondamentales. 4to. Paris, 18:	
Laussedat (A.):	59
: *Rapport sur l'observation de l'Éclipse du 18 Juillet 186	10,
faite en Algérie par MM. Laussedat, de Salicis, Mannheir	m,
Bour et Girard. [2 papers.] 4to. Paris, 186	60
: *Différence de longitude de l'Observatoire de Toulouse	et
de la Citadelle de Montpellier. 4to. Paris, 186	
- : Mémoire sur un fragment de eadran solaire trouvé	en
	to.
: *Sur les applications utiles de la méthode graphique	à
la prédiction des éclinses de Soleil. 4to Paris 187	70
la prédiction des éclipses de Soleil. 4to. Paris, 187—: *Sur l'aurore boréale du 4 Février 1872. 4to. Paris, 187	72
: La lunette astronomique horizontale, destinée à l'observation	022
du Soleil, de ses éclipses, et des passages de Vénus sur cet astr	
Svo. Paris, n.	.a.
Lavaux (Eugène):	,
Nouveau système du Monde, on les premières forces de	la
nature deuxième édition. 8vo. Paris, 18;	75
Lawson (Henry):	
— : Meteorological Journal, kept at Hereford, 1841.	
8vo. Hereford, 182	12
- : A paper on the arrangement of an observatory for practic	201
astronomy and meteorology. 8vo. Bath, 18:	.ctl
astronomy and meteorology.  8vo. Bath, 18	14
- : Observations on the placing of thermometers, with the	110
plan of a stand, by which many of the errors arising fro	
want of uniformity will be avoided. Single sheet, 8vo., 184	15



Lecouturier ( - ) et A. Chapuis:

— : Carte générale de la Lune. 1 shect, Paris, n.d.

---: La Lune. Description et topographie . . . . pour servir

Lecouturier ( - ) et A. Chapuis -continued.

à l'explication de la carte de la Lune des mêmes auteurs. 8vo. Paris, n.d. Ledger (Edmund): --: Intra-Mercurial planets. A lecture delivered in Gresham 8vo. Cambridge, 1879 College, London. - : The Sun; its planets and their satellites. A course of lectures upon the solar system, read in Gresham College, London, in the years 1881 and 1882. Svo. London, 1882 Leeds Correspondent; a literary, mathematical, and philosophical miscellany . . . . edited by J. Ryley (and J. Whitley). 12mo. Leeds, 1815-23 Vol. 1−5. Leeds Philosophical and Literary Society: 8vo. Leeds, 1863-84 Annual Report, 1862-84. Lefébure (Auguste): Thèse d'astronomie, sur le mouvement elliptique des astres. (Thèses Fac. Sci., Paris, No. 171.) 4to. Paris, 1853 Lefort (F.), see Paris, Observatoire. Lefort (F.) et J. Houel: \*Note avant pour objet de signaler les erreurs nombreuses qui existent dans les tables de logarithmes de Callet. 8vo. Paris, 1858 Legendre (Adrien Marie): — : Essai sur la théorie des nombres . . . . Seconde édition. 4to. Paris, 1808 --- : Exercices de calcul intégral sur divers ordres de transcendantes, et sur les quadratures. [Tome 1.] 4to. Paris, 1811 : Éléments de géométrie, avec des notes. Onzième édition. 8vo. Paris, 1817 —: Elements of geometry and trigonometry, with notes . . . . Edited by David Brewster . . . . with notes and additions, and an introductory chapter on proportion [by Thomas 8vo. Edinburgh, 1824 - : Elements of geometry and trigonometry. Revised and adapted to the course of mathematical instruction in the United States, by Charles Davies. 8vo. New York, 1854 ——— . Arc du méridien, see Delambre. Le Gentil de la Galaisière (G. H. J. J. B.): Voyage dans les mers de l'Inde, fait par ordre du roi à l'occasion du Passage de Vénus sur le disque du Soleil le 6 Juin 1761 et le 3 du même mois 1769. 2 vols. 4to. Paris, 1779-81 Legh (Peter): An essay on anemology and ombrology, the only possible theory for weather calculations without the mysterious arts . . . . with a weather almanae for 1849. 8vo. London, n.d.

> \*Résultats d'Observations de la planète Saturne, faites de 1868 à 1874 à Fontenay (Calvados). 8vo. Bruxelles, 1876

8vo. Livorno, 1880-82

Leghorn, Regi Istituti Tecnico e Nautico:

Annali, 1877-81. Vol. 7-10.

Lehardelay (Charles):

Lehmann (Fr. Xav.):

Die Sternbilder des Thierkreises. 8vo. Constanz, 1852 Lehmann (Jacob Wilhelm Heinrich): ---: Abhandlung über die höchst merkwürdige, aber bisher. wie es scheint, noch zu wenig beachtete ringförmige Sonnenfinsterniss vom 7. September 1820. 8vo. Berlin, 1820 —: Ueber die sehr grossen und totalen Sonnen-Verfinsterungen auf der Erde überhaupt . . . . Zweite Auflage. 4to. Hamburg, 1842 Le Hon (H.): Manuel d'Astronomie, de Météorologie et de Géologie, à l'usage des gens du monde . . . . Quatrième édition 8vo. Bruxelles et Leipzig, 1860 Leibnitz (Gottfried Wilhelm): Opera omnia, nunc primum collecta . . . . studio L. Dutens. 6 vols. 4to. Genevæ, 1768 Tomus I. Theologica. 2. Logica, metaphysica, physica, chymia, &c. 3. Mathematica. 4. Philosoph., histor., jurisprudent. 5. Philologica. 6. Philologica, etymologica. Leibnitz (Gottfried Wilhelm) et Jean Bernoulli: Commercium philosophicum et mathematicum, 1694-1716. 2 vols. 4to. Lausannæ 1745 Leiden, Sternwarte: ---: Annalen. Band 1-4. 4to. Harlem, Haag, 1868-75 Band 1-3 herausgegeben von F. Kaiser. " , H. G. van de Sande Bakhuyzen. — : Verslag van den staat der Sterrewacht te Leiden . . . . 1863-70, uitgebracht door F. Kaiser. 8vo. Amsterdam, 1864 - : Ditto, 1873-74, uitgebracht door H. G. van de Sande

Leipzig, Astronomische Gesellschaft:

---: Publicationen, 1-17. 4to. Leipzig, 1865-83

1. Hülfstafeln zur Berechnung specieller Störungen.

— : Catalogus van de Boeken [with 2 supplements].

2. Lesser, Tafeln der Metis.

Bakhuyzen.

3. Weiler, Ueber das Problem der drei Körper.

4. Houel, Tables pour la réduction du temps en parties décimales du jour.

8vo. Amsterdam, 1874

8vo. 'sGravenhage, 1877-82

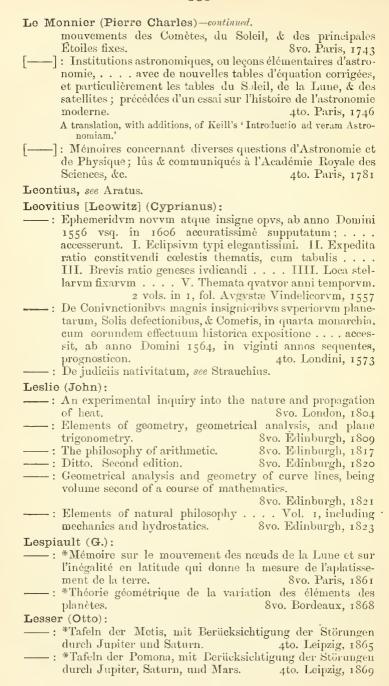
 Auwers, Reduction der Beobachtungen der Fundamentalsterne am Passageninstrument zu Palermo 1803–1805.

6. Rechtwinklige und Polarcoordinaten des Jupiter.

- Auwers, Veränderliche Eigenbewegungen. Theil 2, Bestimmung der Elemente der Siriusbahn.
- 8. Schjellerup, Genäherte Oerter der Fixsterne, für die Epoche 1855.
- 9. Lesser, Tafeln der Pomona.
- 10. Becker, Tafeln der Amphitrite.
- Winnecke, Bestimmung der Parallaxe des zweiten Argelander'schen Sternes.

### Leipzig, Astronomische Gesellschaft-continued. 12. Weiler, Grundzüge einer neuen Störungstheorie. 13. Spörer, Beobachtungen der Sonnenflecken. 14. Auwers, Fundamental-Catalog für die Zonenbeobachtungen am nördl. Himmel. 15. Hartwig, Durchmesser der Planeten Venus und Mars. 16. Oppolzer, Syzygien-Tafeln für den Mond. 17. Auwers, Mittlere Oerter von 83 südlichen Sternen für 1875. — : Vierteljahrsschrift, Jahrgang 1-18. 8vo. Leipzig, 1866-83 I. Supplementheft (Jahrg. 3). Von Asten, Hülfstafeln zur Reduction der in der 'Hist. Cél. Française' enthaltenen Beobachtungen. (Jahrg. 4). Tafeln zur Reduction von Fixstern-Beobachtun-2. gen, 1726-50. (Jahrg. 14). Bruhns, Catalog der Bibliothek. Leipzig, Fürstliche Jablonowski'sche Gesellschaft: ---: Abhandlungen, bei Begründung der Königlich-Sächsischen Gesellschaft der Wissenschaften am Tage der zweihundertjährigen Geburtsfeier Leibnizens herausgegeben. 4to. Leipzig, 1846 ——: Preisschriften. 1-5, 18. 8vo. Leipzig, 1847-75 8vo. Leipzig, 1875, '78, '79, '81, '82 ---: Jahresbericht. Leipzig, Königlich-Sächsische Gesellschaft der Wissenschaften: — : Abhandlungen der mathematisch-physischen Classe. 8vo. Leipzig, 1852-82 Band 1-12. —: Berichte über die Verhandlungen, 1846-47. Band 1. 8vo. Leipzig, 1848 — : Berichte über die Verhandlungen, mathematisch-physische Classe, 1849-81. Band 1-33. 8vo. Leipzig, 1882 Leipzig, Königl. Universitäts-Sternwarte: ---: Geschichte und Beschreibung der Leipziger Sternwarte . . . . Herausgegeben von Dr. C. Bruhns. 4to. Leipzig, 1861 — : Beobachtungen . . . . mit vorausgeschickter Beschreibung der jetzigen Einrichtung dieser Sternwarte . . . . von A. F. Möbius. 8vo. Leipzig, 1823 —: Resultate aus Beobachtungen. I. Beobachtungen am Meridiankreis, von Rudolf Engelmann. 4to. Leipzig, 1870 -: See also Bruhns; Engelmann; Vogel. Leith (John): The true physical cause of the precession of the Equinox. 8vo. Auckland [1876] Le Jeune (Guillaume Alexandre): Dissertatio Astronomica, exhibens definitiones ex nonnullis Pleiadum occultationibus deductas. [Inaugural Disserta-8vo. Lugduni-Batavorum, 1845 tion. Le Monnier (Pierre Charles): ---: Histoire Céleste, ou recueil de toutes les observations astronomiques faites par ordre du Roy; avec un discours préliminaire sur le progrès de l'Astronomie. 4to. Paris, 1741

— : La théorie des Comètes, où l'on traite du progrès de cette partie de l'Astronomie; avec des tables pour calculer les



Leveau (Gustave):	
-: *Travaux Astronomiques. 4to. Paris	
: *Recherches sur la comète périodique de D'Arrest, et	
détermination des éléments en 1851, 1869 et 1877.	
4to. Paris [1877]	
: *Théorie de Vesta. 4to. Paris [1878]	
: *Théorie du mouvement de Vesta. 4to. Paris [1880]	
-: *Sur la comète périodique de D'Arrest, et son prochain	
retour en 1883. 4to. Paris [1883]	
Levêque (Pierre):	
: Tables générales de la hauteur et de la longitude du nona-	
gésime, calculées pour toutes les latitudes terrestres.	
2 vols. Svo. Avignon, 1776	
: Recueil de tables astronomiques et nautiques, dressées pour	
le calcul des latitudes et des longitudes en mer.	
8vo. Nantes, 1779	
Levera (Franciscus):	
Prodromys vniversae astronomiae restitutae; de anni Solaris,	
& Siderei, ac Dierum magnitudine in omni Æuo, & de	
reliquis periodis, motibus, & circulationibus solaribus	
ac etiam sidereis, ab authore exploratis (cum	
catalogo stellarum). fol. Romæ, 1663	
To Womion (Hyboin Took Toront)	
Le Verrier (Urbain Jean Joseph):	
: *Mémoire sur les variations séculaires des éléments des	
orbites pour les sept planètes principales, Mercure, Vénus, la Terre, Mars, Jupiter, Saturne, et Uranus.	
a terre, mars, suprier, Saturne, et Uranus.	
8vo. Paris [1840]: *Mémoire sur la détermination des inégalités séculaires des	
planètes. Svo. Paris [18.11]	
planètes. Svo. Paris [1841]: *Développements sur plusieurs points de la théorie des	
perturbations des planètes. 4to. Paris, 1841	
*Recherches sur l'orbite de Mercure et sur ses pertur-	
bations. Détermination de la masse de Vénus, et du	
diamètre du soleil. 4to. Paris, 1843	
*Recherches sur les mouvements de la planète Herschel.	
8vo. Paris, 1846	
-: *Recherches sur les comètes périodiques. 4to. Paris, 1847	
-: *Examen de la discussion soulevée au sein de l'Académie	
des Sciences au sujet de la découverte de l'attraction	
universelle. 4to. Paris, 1869	
*Discours prononcés aux funérailles. 4to. Paris, 1877	
production with a state of the	
-: See also Bertrand (J.): Paris, Observatoire, Annales.	
—: See also Bertrand (J.); Paris, Observatoire, Annales.	
: See also Bertrand (J.); Paris, Observatoire, Annales.  Lewis (Enoch):  A treatise on plane and spherical trigonometry, including the	

construction of the auxiliary tables; a concise tract on the conic sections, and the principles of spherical projection.

Lewis (George Cornewall):

An historical survey of the Astronomy of the Ancients.

8vo. London, 1862

8vo. Philadelphia, 1844

Lewis (Henry Carvill):
Ley (W. Clement), see London, Meteorological Office.
Leybourn (Thomas):  —: The mathematical repository. 3 vols. (Vol. 1, second edition.) 12mo. London, 1799-1804  —: Ditto, New series. 4 vols. London, 1806-19  —: The philosophical repository. 2 vols. 12mo. London, 1801-4  —: The mathematical questions proposed in the Ladies' Diary, and their original answers, together with some new solutions 1704 to 1816. 4 vols. 8vo. London, 1817
Leybourn (William):  —: Cursus Mathematicus. Mathematical sciences, in nine books: comprehending arithmetick, geometry, cosmography, astronomy, navigation, trigonometry, with the description, construction, and use of geometrical and nautical instruments.  —: Dialling; plain, concave, convex, projective, reflective, refractive. Showing how to make all such dials and to adorn them with all useful furniture relating to the course of the sun.  —: Mathematical institutions, in three parts. I. Clavis, [the] key. 2. Janua, the gate. 3. Ancilla, [the] handmaid to the mathematical sciences.  —: The compleat surveyor, or the whole art of surveying of land. Fifth edition, by Samuel Cunn. fol. London, 1722
Leyton Observatory, Essex:  Astronomical Observations taken during the years 1862-77, at the private observatory of Joseph Gurney Barclay. Vol. 1-4.  4to. London, 1865-78
L'Hôpital, Guillaume François Antoine, Marquis de:  []: Analyse des infiniment petits, pour l'intelligence des lignes courbes. 4to. Paris, 1696 : Suite, see Bougainville: Translation, see Stone and de l'Hôpital.
- : An analytick treatise of Conick Sections, and their use for resolving of equations in determinate and indeterminate problems, made English by E. Stone. 4to. London, 1723
Liagre (J.): : *Sur les corrections de la lunette méridienne.  4to. Bruxelles [1845]
: *Sul movimento delle bolle de' livelli, in consequenza del calore. : *Note sur l'erreur probable d'un passage observé à la lunette méridienne de l'observatoire royal de Bruxelles.  Svo. Bruxelles [1853]

Liais (Emmanuel):

— : Traité d'astronomie appliquée à la géographie et à la navigation, suivi de la géodésie pratique. Svo. Paris, 1867

----: L'Espace Céleste et la nature tropicale. Description physique de l'Univers d'après des observations personnelles faites dans les deux hémisphères. Préface de M. Babinet.

Svo. Paris, n.

Liapounov (M.), see Kasan; Struve (O.) et Liapounov.

Libavius (Andreas) et G. Voetius:

Declamatio de Cometa anni 1604, et G. . . . Voetii . . . . exercitatio de prognosticis cometarum. 4to. Amstelædami, 1665

Libri (Guglielmo):

— : Mémoires de mathématique et de physique. Tome 1.

4to. Florence, 1829

: Histoire des sciences Mathématiques en Italie, depuis la renaissance des lettres jusqu'à la fin du dix-septième siècle. 4 vols. 8vo. Paris, 1838-41

— : Galileo Galilei. Zu seinem Gedächtniss im zweiten Säeularjahr seines Todes. 1. Sein Leben und seine Werke . . . . aus dem Französischen mit Anmerkungen von F. W. Carové. Svo. Wiesbaden, 1842

— : Catalogue of Library [&c.] 3 vols. 8vo. London, 1861–64

Lichtenberg (Georg Christoph):

Physicalische und mathematische Schriften. Band 1. (Biographie von Nicolaus Copernicus, &c.) 8vo. Göttingen, 1803

Lick Observatory:

Report to the Trustees of Observations made on Mt. Hamilton with reference to the location of Lick Observatory, by S. W. Burnham.

4to Chicago, 1880

Lie (Marius Sophus):

\*Repräsentation der Imaginären der Plangeometrie.

8vo. Christiania, 1869

Liebknecht (Johann Georg):

Stellæ Ludovicianæ noviter detectæ. [Inaugural Dissertation.] 4to. Gissæ, 1723

Licchtenberger (Joannes):

Prognostieque, Voorsegginghe van J. L., de welcke hy geschreve heeft nu over de hondert ende ses en dertich Jaren, op die groote versaminghe van Saturnus endo Jupiter, die gheweest is int Jaer ons Heeren 1484. Daerenboven oock op den Eclipsis in de Sonne ghesien int naervolghende Iaer 1485. 4to. 1620

Liévano (Indalecio):

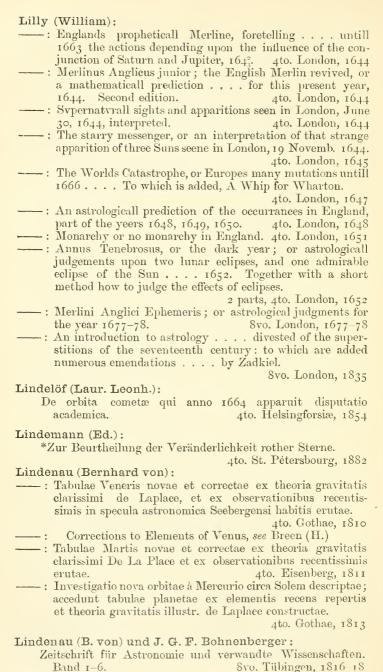
Investigaciones Científicas.

Svo. Bogotá, 1871

Ligowski (W.):

Sammlung fünfstelliger logarithmischer, trigonometrischer, nautischer und astronomischer Tafelu, nebst Erklärungen und Formeln der Astronomie, mit besonderer Rücksicht auf die Nautik.

8vo. Kiel, 1873



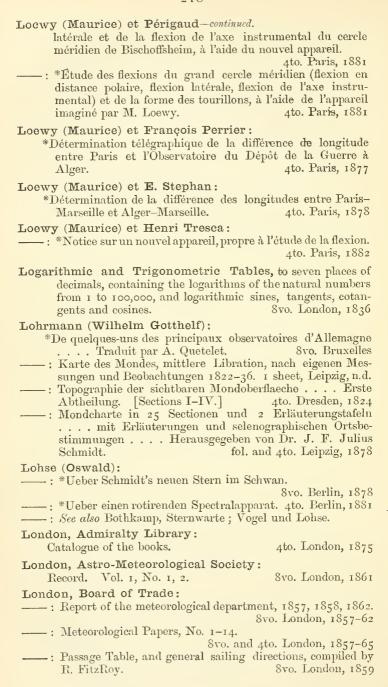
Lindhagen (Daniel Georg): : *Ueber die Genauigkeit der in Lalande's Catalog, publicirt von der British Association, enthaltenen Sternörter.
Svo. St. Pétersbourg [1848] ——: See also Pulkowa, Nicolai-Hauptsternwarte.
Lindo (E. H.): A Jewish calendar for sixty-four years. 8vo. London, 1838
Lindstedt (And.):  —: Undersökning af Meridiancirkeln på Lunds Observatorium, jemte bestämning af densammas polhöjd [Inaugural Dissertation.] 4to. Lund, 1877  —: Beobachtungen des Mars während seiner Opposition 1877 angestellt auf der Sternwarte zu Lund. 4to. Lund, 1878  —: *Beitrag zur Integration der Differentialgleichungen der Störungstheorie. 4to. St. Pétersbourg, 1883
Linnington (R. T.):  ——: A companion to the Globes; comprising an astronomical introduction, the various problems that may be performed by the globes, &c Third edition. Svo. London, 1829  ——: A compendium of Astronomy; comprising a complete treatise, adjusted to the improved state of the science, and an astronomical dictionary.  Svo. London, 1830
Linsser (Carl):  *Vier von De l'Isle beobachtete Plejaden-Bedeckungen, bearbeitet und mit Hansen's Mond-Tafeln verglichen.  4to. St. Petersburg, 1864
Lippold (G. H. E.): Astronomie zur Selbstbelehrung für Nichtstudierende.  8vo. Wien, 1817
Lipsen (Friedrich):  Ohnvorgreiffliche Bedancken über den im Monath November und December anno 1680 erschienenen Cometen.  4to. Rotenburg, 1680
Lisbon, Academia Real das Sciencias:  —: Memorias (Historia e Memorias), 1780-1838. Tomo 1-12. 4to. Lisboa, 1797-1839
—: Historia e Memorias, 2 <sup>a</sup> Serie. Tomo 1-3.  4to. Lisboa, 1843-56
<ul> <li>: Memorias. Classe de sciencias mathematicas, physicas o naturães, Nova Serie. Tomo 1-6. 4to. Lisboa, 1854-81</li> <li>: Annães das Sciencias e Lettras, sciencias mathematicas, physicas, &amp;c. Tomo 1, Março-Septembro, 1857.</li> <li>8vo. Lisboa, 1857</li> </ul>
- : Jornal de sciencias mathematicas, physicas e naturães. Tomo 1-7. Sessão publica, 1875, '77, '80. Sessão publica, 1875, '77, '80. Taboadas perpetuas astronomicas para uso da navegação Portugueza. 4to. Lisboa, 1815
Liskenno (Charles): Lettres à Palmyre sur l'astronomie.  8vo. Paris, 1825

Listing (Johann Benedict):
: *Ueber unsere jetzige Kenntniss der Gestalt und Grösse
der Erde. 8vo. Göttingen, 1872 —: *Neue geometrische und dynamische Constanten des
Erdkörpers. Eine Fortsetzung der Untersuchung über
unsere jetzige Kenntniss der Gestalt und Grösse der
Erde. 8vo. Göttingen, 1878
Littrow (Joseph Johann von):
: *Über den erweiterten Gebrauch der Multiplikationskreise.
8vo. Prag, 1820
: Théoretische und practische Astronomie.
2 vols. 8vo. Wien, 1821
: Elemente der Algebra und Geometrie. 8vo. Wien, 1827 : Vorlesungen über Astronomie. 2 vols. 8vo. Wien, 1830
- : Über den gefürchteten Kometen des gegenwärtigen Jahres
1832, und über Kometen überhaupt. 8vo. Wien, 1832
——: Die Wunder des Himmels, oder gemeinfassliche Darstel-
lung des Weltsystems I. Theorische Astronomie.
II. Beschreibende Astronomie. III. Physische Astro-
nomie; Astronomische Instrumente; Nachträge und Zusätze. 3 vols. and supplement, 8vo. Stuttgart, 1834–37
- : Ditto. Vierte Auflage. Nach den neuesten Fortschritten
der Wissenschaft bearbeitet von Karl v. Littrow.
8vo. Stuttgart, 1854
: Ditto. Anhang zur fünften Auflage. 8vo.
: Die Doppelsterne. 8vo. Wien, 1835
: Sterngruppen und Nebelmassen des Himmels.  8vo. Wien, 1835
- : Vermischte Schriften. Herausgegeben von C. L. v.
Littrow. 3 vols. 8vo. Stuttgart, 1846
: Atlas des gestirnten Himmels für Freunde der Astronomie.
Zweite Auflage. 8vo. Stuttgart, 1854  ——: Ditto. Dritte Auflage, herausg. von K. von Littrow.
Svo. Stuttgart, 1866
: See also Vienna, K.K. Sternwarte.
·
Littrow (Joseph Johann und Karl Ludwig von): Ueber Kometen Mit einem Anhange über den im
Jahre 1835 erscheinenden Halley'schen Kometen von
Karl Ludwig Littrow Neue Auflage. 8vo. Wien, 1835
Littrow (Karl Ludwig von):
- : Beyträge zu einer Monographie des Halley'schen Cometen.
Bey Gelegenheit seiner Erscheinung im Jahre 1835 gemein-
fasslich dargestellt. 8vo. Wien, 1834
: Hülfs-Tafeln für die Wiener Universitäts-Sternwarte.
8vo. 1837 — : Nachträge zu dem Verzeichnisse geographischer Ortsbe-
stimmungen. 8vo. Leipzig, 1845
—: *Deutschlands vorzüglichste Sternwarten. 8vo. Wien, 1848
*Bericht über die in den Jahren 1847-51 ausgeführte
Österreichisch-Russische Verbindungs-Triangulation.
8vo. Wien, 1852

Littrow (Karl Ludwig von)—continued.
: Ditto. 4to. Wien, 1853
—: Uber das allgemeine Niveau der Meere. 8vo. Wien, 1853
: *Die Culminationspunkte der östlichen Central-Alpen.
8vo. Wien, 1853
-: *Bahnnähen zwischen den periodischen Gestirnen des Son-
nensystemes. Svo. Wien, 1854: Beilagen zu Littrow's Kalender, 1854, 1864–1869.
Svo. Wien
-: *Beitrag zur Kenntniss der Grundlagen von Piazzi's
Sternkatalog. 4to. Wien, 1855
: *Über den Zusammenhang von Flecken und Protuberanzen
der Sonne. 8vo. Wien, 1855
: *Über lichte Fäden im dunkeln Felde bei Meridian-
Instrumenten. Svo. Wien, 1856
: *Drei Quellen über den Kometen von 1556. 8vo. Wien, 1856
Bestimmung der Bahnelemente. Svo. Wien, 1857
: *Physische Zusammenkiinfte von Asteroiden in den Jahren
1857, 1858; 1861-67. Svo. Wien, 1857-67 —: *Der Zonen-Apparat am Mittagsrohre der Wiener Stern-
warte. Svo. Wien, 1858
: *Privatleistungen auf astronomischem Gebiete.
Svo. Wien, 1850
: *Physische Zusammenkünfte der Planeten (1) bis (42)
während der nächsten Jahre. 4to. Wien, 1859
: *Über das Mikrometer mit lichten Linien bei den Wiener
Meridian-Instrumenten. 8vo. Wien, 1860
: *Über Herrn M. Eble's graphische Methoden der Auflösung
sphärischer Dreiecke, mit besonderer Rücksicht auf sein
neuestes, 'Stundenzeiger' oder 'Horoskop' genanntes
Instrument. 8vo. Wien, 1860 —: *Über eine Modification des Hansen'schen Registrirappa-
rates. Svo. Wien, 1865
-: *Sternschnuppen und Kometen, Geschichte der Entdeckung
des Zusammenhanges zwischen diesen beiden Gattungen von
Himmelskörpern. 8vo. Wien, 1867
— : *Bestimmung der Meridiandifferenz Leipzig-Dablitz.
8vo. Wien, 1867
: *Ditto. 4to. Wien, 1868
——: Suggestions for mariners about the use and the exactness of
the methods for determining the longitude and the variation
of compass by circummeridian altitudes. 8vo. Vienna, 1868
: *Zählung der nördlichen Sterne im Bonner Verzeichnisse
nach Grössen.  8vo. Wien, 1869 : Ueber das Zurückbleiben der Alten in den Naturwissen-
schaften.  Svo. Wien, 1869
-: *Bericht über die von E. Weiss ausgeführte Bestim-
mung der Breite und des Azimuthes zu Dablitz.
4to. Wien, 1871
: *Bericht über die von E. Weiss ausgeführte Be-
stimmung der Breite und des Azimuthes auf dem Laacr
Berge bei Wien. 4to. Wien, 1871

Littrow (Karl Ludwig von)—continued.  —: *Bericht über die von C. Bruhns, W. Förster, und E. Weiss ausgeführten Bestimmungen der Meridiandiffe renzen Berlin-Wien-Leipzig. 4to. Wien, 1872—: *Zur Kenntniss der kleinsten sichtbaren Mondphasen.  Svo. [Wien, 1872]
: *Die neue Sternwarte der Wiener Universität. 8vo. Wien, 1874
— : See also Vienna, K.K. Sternwarte.
Littrow (Otto von):  ——: *Über eine neue Einrichtung des Spectralapparates.  8vo. Wien, 1863
: *Über einen Heliostaten nach August's Princip.  8vo. Wien, 1863
Litwinowa-Iwaschinka (Elisabetha v.):  Lösung einer Abbildungsaufgabe. Inaugural Dissertation.  8vo. St. Petersburg, 1879
Liverpool Astronomical Society:  ——: Abstracts of Proceedings. Vol. 1, 1882–83.  8vo. Liverpool, 1883
: Transactions. No. 1, 2, 8vo. Liverpool, 1883–84
Liverpool Free Public Library: Annual Report, 1878-84.  8vo.
Liverpool Literary and Philosophical Society: Proceedings, 1849-83. No. 6-9, 11-37. 8vo. Liverpool, 1851-83 No. 26 contains index to 1-25.
Liverpool Observatory:  —: Report of the Astronomer to the Marine Committee,  Mersey Docks and Harbour Board, 1863-65, 1869, 1871,  1873-78, 1883. Svo. Liverpool, 1863-83  —: Meteorological Results, see Hartnup (J.).
Ljunggren (Gustavus Theodor):  Dissertatio Astronomica de Cometarum elementis, parabolice et elliptice, computandis. [Inaugural Dissertation.]  4to. Lundæ, 1835
Lloyd (Humphrey):  Elementary treatise on the wave-theory of light. Third edition.  8vo. London, 1873
Löbel (Johann Gottlob Friedrich):  Der Halley'sche Comet in seiner vierundzwanzigsten Wieder- kunft seit dem Jahr sechszehn nach Chr. Geb. im Jahr 1835.  Svo. Nürnberg, 1835
Lockhart (James): ——: Resolution of Equations Part the first.
24to. Oxford, 1837  Extension of the celebrated theorem of C. Sturm, whereby the roots of numeral equations may be separated from each other, with copies and examples.  4to. Oxford, 1837  4to. Oxford, 1837

Lockhart (James)—continued.
- : Resolution of equations by means of inferior and superior
limits. 4to. London, 1842  —: The nature of the roots of numerical equations.
Svo. London, 1850
Lockyer (Joseph Norman):
: The Spectroscope and its applications second edition.
8vo. London, 1873
—: Contributions to Solar Physics. I. A popular account of
inquiries into the physical constitution of the Sun, with special reference to recent spectroscopic researches; II.
Communications to the Royal Society of London, and the
French Academy of Sciences, with notes. 8vo. London, 1874
: Science primers: Astronomy fourth edition.
12mo. London, 1877
-: Studies in Spectrum analysis. Stargazing past and present. Svo. London, 1878
Loewenherz (L.):
: *Ueber Veränderlichkeit von Platin-Gewichtsstücken. 4to. Berlin, 1875
: Bericht über die wissenschaftlichen Instrumente auf der
Berliner Gewerbeausstellung im Jahre 1879.
8vo. Berlin, 1880
Locwy [Löwy] (Maurice):
: *Über die Bahn der Leda. 8vo. Wien, 1857 : *Bahnbestimmung des ersten Kometen 1857.
8vo. Wien, 1850
- : *Ephémérides des étoiles de culmination lunaire et de lon-
gitude pour 1879, 1882-84. 4to. Paris, 1878, 1881-83: Rapport sur les observatoires astronomiques de province.
: Rapport sur les observatoires astronomiques de province. Année 1880-81. Svo. Paris, 1881-82
: *Nouvelles méthodes pour la détermination de la position
relative de l'équateur instrumental par rapport à l'équateur
réel, et déclinaisons absolues des étoiles, et de la latitude
absolue. 4to. Paris, 1883 ——: *Description sommaire d'un nouveau système d'équatoriaux,
et de son installation à l'Observatoire de Paris.
4to. Paris, 1883
: *Méthode nonvelle pour la détermination des ascensions
droites et déclinaisons absolues des étoiles. 4to. Paris, 1883
droites et déclinaisons absolues des étoiles. 4to. Paris, 1883  — : See Paris, Observatoire.
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clerc:
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clerc:  *Détermination de la différence de longitude entre Paris et
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clerc:  *Détermination de la différence de longitude entre Paris et Berlin.  4to. Paris, 1879
—: See Paris, Observatoire.  Loewy (Maurice) et Lo Clerc:  *Détermination de la différence de longitude entre Paris et Berlin.  4to. Paris, 1879  Loewy (Maurice) et Th. von Oppolzer:
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clere:  *Détermination de la différence de longitude entre Paris et Berlin.  4to. Paris, 1879  Loewy (Maurice) et Th. von Oppolzer:  *Détermination de la différence de longitude entre Paris et
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clerc:  *Détermination de la différence de longitude entre Paris et Berlin.  Loewy (Maurice) et Th. von Oppolzer:  *Détermination de la différence de longitude entre Paris et Bregenz.  4to. Paris, 1880
— : See Paris, Observatoire.  Loewy (Maurice) et Lo Clere:  *Détermination de la différence de longitude entre Paris et Berlin.  4to. Paris, 1879  Loewy (Maurice) et Th. von Oppolzer:  *Détermination de la différence de longitude entre Paris et



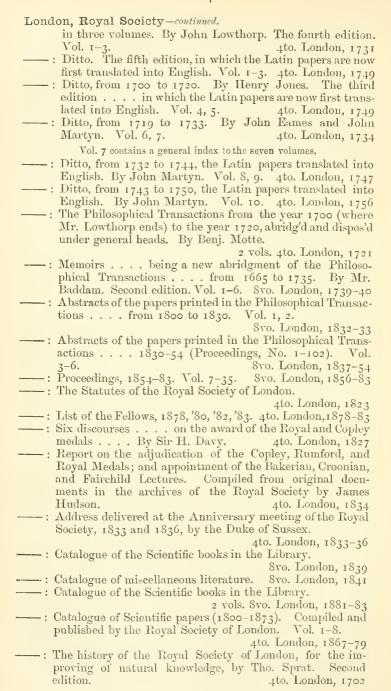
London, Board of Trade—continued.
—: Swinging Ship for deviation. Compiled by R. FitzRoy.
8vo. London, 1859
: Notes on Meteorology, 1859. Compiled by R. FitzRoy.
8vo. London, 1859
-: Barometer and Weather guide, 1858. Compiled by R.
FitzRoy. Second edition. 8vo. London, 1859
—: Ditto. Fourth edition. Svo. London, 1861
: Barometer Manual, 1861. Compiled by R. FitzRoy. Fourth edition.
edition. 8vo. London, 1861 : See also Bothkamp, Sternwarte; Meteorological Office.
London, Board of Trade, Standard Weights & Measures Department:
: An account of the comparisons of the three Parliamentary
copies of the Imperial standards. 8vo. London, 1877
-: Eleventh Annual Report of the Warden of Standards,
1876–77. Svo. London, 1877
-: Memorandum on an examination of Standard Measures of
length for the Rumford Committee of the American Academy. (By H. J. Chaney.) fol. London, 1880
-: Calculations of densities and expansions. (By H. J.
Chaney.) Svo. London, 1883
: Report by the Board of Trade on their proceedings and
business under the Weights and Measures Act, 1878.
fol. London, 1883
London, see British Association for the Advancement of Science.
London, British Horological Institute:
Horological Journal. Vol. 1-26. 8vo. London, 1858-82
London, Geological Society:
—: Proceedings, 1826–45. 4 vols. 8vo. London, 1834–46
—: Quarterly Journal. Vol. 1-40. Svo. London, 1845-84
London, Institute of Actuaries:
: Journal, No.84-129. Svo. London, 1872-83
: Tables deduced from the mortality experience of life
assurance companies. 8vo. London, 1872
: Catalogue of the Library. 8vo. 1880
London Institution:
Catalogue of the Library. 3 vols. 8vo. London, 1835-43
London, Mathematical Society, Spitalfields:
Catalogue of books [with the rules of the Society].
8vo. London, 1821
London, Meteorological Office:
: Report of the Meteorological Committee (Council) of the
Royal Society for the years 1867-75, 1877-84.
8vo. London, 1868-84
: Report of an Inquiry into the connexion between strong winds and barometrical differences by R. H. Scott.
8yo. London, 1868
-: Report on the meteorology of the North Atlantic,
between the parallels of 40° and 50° N. By H. Toynbee.
Svo. London, 1869

London, Meteorological Office—continued.
-: Report on the use of Isobaric Curves, and a line of
. Report On the use of isobatic our ves, and a fine of
greatest barometric change in attempting to foretell winds
by H. Toynbee. Svo. London, 1869
: Charts showing the surface temperature of the South
Atlantic Ocean. fol. London, 1869
: Quarterly Weather Report, 1869-80. 4to. London, 1870-83
: Barometer Manual, compiled by R. H. Scott.
8vo. London, 1871
Ovo. Hondon, 10/1
: Contributions to our knowledge of the meteorology of Cape
Horn and the West Coast of South America.
4to. London, 1871
: A discussion of the meteorology of the part of the Atlantic
lying north of 30° N., for the eleven days ending 8th
February 1870. [With charts and diagrams.]
4to. London, 1872
: Currents and surface temperature of the North Atlantic
Ocean from the Equator to latitude 40° N., for each month
of the year, with a general current chart. 4to. London, 1872
*Notes on the form of cyclones in the Southern Indian
Ocean, and on some of the rules given for avoiding their
centres. By C. Meldrum. Svo. London, 1873
centres. By C. Meldrum. 8vo. London, 1873  —: Contributions to our knowledge of the meteorology of the
: Contributions to our knowledge of the meteorology of the
Antarctic regions. 4to. London, 1873
: Charts of meteorological data for square 3, Lat. 0°-10° N.,
Long. 20°-30° W. fol.
- : Remarks to accompany the monthly charts of meteorological
data for square 3. 4to. London, 1874
: Report of the Proceedings of the Meteorological Conference
: Hourly Readings from the self-recording instruments at the
seven observatories in connection with the Meteorological
Office, 1874–80. fol. London.
: Ditto. 1881-82. 4to. London, 1882-83
-: Report of the Proceedings of the Meteorological Congress
at Vienna. 8vo. London, 1874
: Report on weather telegraphy and storm warnings pre-
Exeport on weather telegraphy and storm warmings pro-
sented to the Meteorological Congress at Vienna by a
Committee appointed at the Leipzig Conference.
8vo. London, 1874
—: Reports of the Permanent Committee of the first Inter-
national Meteorological Congress at Vienna, for the years
1874, 1876, 1878. 3 parts, 8vo. London, 1875–79
— : Ditto. Supplement, 1876. 8vo. London, 1877
-: Ditto. Supplement, 1876. 8vo. London, 1877
- : Report of the Proceedings of the Conference on Maritime
Meteorology, held in London, 1874. 8vo. London, 1875
- : Instructions in the use of meteorological instruments. By
R. H. Scott Svo. London, 1875
: On the physical geography of the part of the Atlantic which lies between 20° N. and 10° S.; and which extends from 10°
lies between 20° N and 10° S and which extends from 10°
to 40° W. By H. Toynbee. Svo. London, 1876
C + 1 time to the meteorology of Japan by T H Tirand
-: Contribution to the meteorology of Japan, by T. H. Tizard.
4to. London, 1876

London, Meteorological Office—continued.
-: Report of the Proceedings of the second International
Meteorological Congress at Rome, 1879. 8vo. London, 1879
-: Report on the meteorology of Kerguelen Island, by Rev.
S. J. Perry. 4to. London, 1879
: Aids to the study and forecast of the weather, by W. Clement
Ley. Svo. London, 1880
—: Meteorological Observations at stations of the second order,
1878-79. 4to. London, 1880 82
: Report of the International Meteorological Committee.
Meeting at Berne, 1880. Svo. London, 1881
—: Report on the storm of October 13-14, 1881 (by R. H.
Scott). Svo. London, 1882
-: Report of the second meeting of the International Meteo-
rological Committee, held at Copenhagen, 1882.
8vo. London, 1883
—: Sunshine records of the United Kingdom for 1881.
8vo. London, 1883
—: Rainfall tables of the British Isles for 1866-80. Compiled
by G. J. Symons. Svo. London, 1883
- : Meteorological Atlas of the British Isles. 4to. London, 1883
: The monthly weather report for January 1884.
4to. London, 1884
London, Meteorological Society:
-: Transactions of the Meteorological Society of Great Britain,
-: *Report of the Council of the British Meteorological Society,
1851, 1856–58. Svo.
: Proceedings of the British Meteorological Society, 1861-67.
Vol. 1-3. Svo. London, 1863-67
—: Proceedings of the Meteorological Society, 1867-71. Vol.
4, 5. 8vo. London, 1869–71
- : Quarterly Journal of the Meteorological Society (1871-83).
T 1 0 0
Vol. 1-9. 8vo. London, 1873-83
: Quarterly Journal of the Royal Meteorological Society,
1884. Vol. 10. 8vo. London, 1884
-: Index to the publications of the English Meteorological
Societies, 1839 to 1881. Svo. London, 1881
-: The history of English Meteorological Societies, 1823 to
1880 By G. J. Symons. Svo.
: The snow storms of January 17th to 21st, 1881. Svo.
: Hints to Meteorological observers, with instructions for
taking observations, and tables for their reduction. Pre-
pared by W. Marriott. Svo. London, 1881
: The Meteorological Record. Monthly results of observa-
tions made at the stations of the (Royal) Meteorological
tions made at the stations of the (hoyar) intereording teat
Society, with remarks on the weather, 1881-83. By W.
Marriott. No. 1–10. Svo. London.
-: Instructions for the observation of phenological phenomena.
Second edition. 8vo. London, 1883
— Charter & By-Laws of the Royal Meteorological Society,
188.4. Svo. London

London, Meteorological Society—continued.
: List of Fellows, 1884. Svo. London
—: Catalogue of the Library. 8vo. London, 1876
London, Nautical Almanac and Astronomical Ephemeris:
—: 1767–1887. Svo. London, 1766–1883
: Tables requisite to be used with the Nautical Ephemeris for finding the latitude and longitude at sea. Second
edition. 8vo. London, 1781
—: Ditto, Third edition. 8vo. London, 1802
: See also Garrard (W.); Lax (W.).
— : Ditto. Appendix to the third edition being new tables of natural sines, natural versed sines, and logarithms
of numbers.
: Selections from the additions that have been occasionally
annexed to the Nautical Almanac from its commencement
to the year 1812. Svo. London, 1813 : Natural versed sines from o° to 125°, and logarithmic
versed sines from 0° to 135°, or 0h to 9h, used in computing
lunar distances. fol. London, 1856
: Haversines natural and logarithmic used in computing
lunar distances Edited by J. C. Hannyngton.  fol. London, 1876
: Supplement, 1867-69: Ephemerides of the minor planets
for the years 1864–66. 8vo. London
: See also Baily (F.); South (J.).
London, Photographic Society:
-: Journal containing the Transactions of the Society,
and a general record of photographic art and science. Vol. 1–16. Svo. London, 1854–76
: The Photographic Journal, including the Transactions of
the Photographic Society of Great Britain. New series.
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society:
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83
the Photographic Society of Great Britain. New series. Vol. 1–8.  Svo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5.  Svo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland:
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: ——: Transactions. 3 vols. 4to. London, 1827–35
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: ——: Transactions. 3 vols. 4to. London, 1827–35 ——: Journal. 20 vols. 8vo. London, 1834–63
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. 3 vols. 4to. London, 1827–35 —: Journal. 20 vols. 8vo. London, 1834–63 —: Journal, new series. Vol. 1–16. 8vo. London, 1865–84
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: ——: Transactions. 3 vols. 4to. London, 1827–35 ——: Journal. 20 vols. 8vo. London, 1834–63
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. 3 vols. 4to. London, 1827–35 —: Journal. 20 vols. 8vo. London, 1834–63 —: Journal, new series. Vol. 1–16. 8vo. London, 1865–84 —: Catalogue of historical manuscripts in the Arabic and Persian languages. 8vo. London, 1854
the Photographic Society of Great Britain. New series. Vol. 1–8.  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. —: Journal. —: Journal. —: Journal. —: Journal, new series. Vol. 1–16. 8vo. London, 1834–63 —: Catalogue of historical manuscripts in the Arabic and Persian languages.  London, Royal Astronomical Society: —: Memoirs, Vol. 1–47.  4to. London, 1822–83
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. 3 vols. 4to. London, 1827–35 —: Journal. 20 vols. 8vo. London, 1834–63 —: Journal, new series. Vol. 1–16. 8vo. London, 1865–84 —: Catalogue of historical manuscripts in the Arabic and Persian languages. 8vo. London, 1854  London, Royal Astronomical Society: —: Memoirs, Vol. 1–47. 4to. London, 1822–83 —: A general index to the first thirty-eight volumes of the
the Photographic Society of Great Britain. New series. Vol. 1–8.  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. —: Journal. —: Journal. —: Journal. —: Journal. —: Ovols. 8vo. London, 1827–35 —: Journal, new series. Vol. 1–16. 8vo. London, 1834–63 —: Catalogue of historical manuscripts in the Arabic and Persian languages.  London, Royal Astronomical Society: —: Memoirs, Vol. 1–47. —: A general index to the first thirty-eight volumes of the Memoirs.  8vo. London, 1871
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. 3 vols. 4to. London, 1827–35 —: Journal. 20 vols. 8vo. London, 1834–63 —: Journal, new series. Vol. 1–16. 8vo. London, 1865–84 —: Catalogue of historical manuscripts in the Arabic and Persian languages. 8vo. London, 1854  London, Royal Astronomical Society: —: Memoirs, Vol. 1–47. 4to. London, 1822–83 —: A general index to the first thirty-eight volumes of the Memoirs. 8vo. London, 1871 —: Monthly Notices, containing papers, abstracts of papers
the Photographic Society of Great Britain. New series. Vol. 1–8. 8vo. London, 1877–84  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. 3 vols. 4to. London, 1827–35 —: Journal. 20 vols. 8vo. London, 1834–63 —: Journal, new series. Vol. 1–16. 8vo. London, 1865–84 —: Catalogue of historical manuscripts in the Arabic and Persian languages. 8vo. London, 1854  London, Royal Astronomical Society: —: Memoirs, Vol. 1–47. 4to. London, 1822–83 —: A general index to the first thirty-eight volumes of the Memoirs. 8vo. London, 1871 —: Monthly Notices, containing papers, abstracts of papers and reports of the proceedings. 1827–83. Vol. 1–44. 8vo. London, 1831–84
the Photographic Society of Great Britain. New series. Vol. 1–8.  London, Physical Society: Proceedings, 1874–83. Vol. 1–5. 8vo. London, 1876–83  London, Royal Asiatic Society of Great Britain and Ireland: —: Transactions. —: Journal. —: Journal. —: Journal. —: Journal. —: Ovols. 8vo. London, 1827–35 —: Journal, new series. Vol. 1–16. 8vo. London, 1834–63 —: Catalogue of historical manuscripts in the Arabic and Persian languages. —: Nemoirs, Vol. 1–47. —: Memoirs, Vol. 1–47. —: A general index to the first thirty-eight volumes of the Memoirs. —: Monthly Notices, containing papers, abstracts of papers and reports of the proceedings. 1827–83. Vol. 1–44.

London, Royal Astronomical Society—continued.
: Address and regulations of the Astronomical Society of
London. Svo. London, 1820–21
: Charter and Bye Laws, 1831, '44, '58, '70, '80. Svo. London
*Report of the Committee appointed for the purpose of examining the telescope constructed by Mr. Tulley.
8vo. London, 1826
- : Statement of a plan for making a minute survey of the
heavens, and for the formation and publication of some new
celestial charts under the superintendence and direction of
the Royal Academy of Sciences at Berlin. Svo. London, 1826
—: New tables for facilitating the computation of precession,
aberration and nutation of 2881 principal fixed stars;
together with a catalogue of the same reduced to January
1, 1830 to which is prefixed an introduction
by Francis Baily. 4to. London, 1827
: Meridian Ephemeris of the sun and planets for the year
1836. Computed at the expense of Francis Baily. Svo. London, 1835
: Catalogue of the Library. [With Appendices 2-16.]
Svo. London, 1850
London, Royal Geographical Society:
——: Journal, 1831–80. Vol. 1–50. 8vo. London, 1831–80
— : General Index to the fourth 10 vols. Svo. London, 1881
—: Proceedings. Vol. 2-5, 7-22. Svo. London, 1858-78
: Proceedings and Monthly Record of Geography; New
monthly series. Vol. 1-6. Svo. London, 1879-84
— : Classified catalogue of the Library. Svo. London, 1871
London, Royal Institution of Great Britain:
: Journal. Vol. 1, 2.
: Notices of Proceedings at the Meetings, 1851-84. Vol.1-10.
8vo. London, 1854-84  ——: Classified Catalogue of the Library.
2 vols. 8vo. London, 1857–82
- : See also Journal of Science and the Arts.
London, Royal Society:
-: Philosophical Transactions: giving some accompt of the
present undertakings, studies, and labours of the ingenious
in many considerable parts of the world, 1665-1775. Vol.
1-65. 4to. London, 1667-1775
- : Philosophical Transactions of the Royal Society of London,
1776-91. Vol. 66-81. 4to. London, 1776-91
—: Philosophical Transactions, 1792-99, 1801-1882 [Vol.
82-172]. 4to. London, 1792-1882
: A general index or alphabetical table to all the Philoso-
phical Transactions, from the beginning to July 1677. 4to. London, 1678
: A general index to the Philosophical Transactions from the
first to the end of the seventieth volume [1665-1780], by
Paul Henry Maty. 4to. London, 1787
-: The Philosophical Transactions and collections to the end
of the your tree abuiled and dienor'd under general heads



London, Royal Society—continued.  : Ditto. The fourth edition.  4to. London, 1734
-: A review of the works of the Royal Society of London, containing animadversions on such of the papers as deserve
particular observation, by Sir John Hill Second edition. 4to. London, 1780  : An authentic narrative of the dissentions and debates in
the Royal Society, containing the speeches at large of Dr. Horsley, Dr. Maskelyne, Mr. Maseres, Mr. Poore, Mr.
Glenie, Mr. Watson, and Mr. Maty. 8vo. London, 1784  — : History of the Royal Society from its institution to the end of the eighteenth century, by Thomas Thomson.
4to. London, 1812 : A history of the Royal Society, with memoirs of the Presi-
dents, compiled from authentic documents, by Charles Richard Weld. 2 vols. 8vo. London, 1848  —: An additional word on the pristine establishment of the
Royal Society Club (by Admiral W. H. Smyth).  4to. London, 1860
•
London, Royal United Service Institution:
— : Journal. Vol. 1-27. Svo. London, 1858-84 — : Catalogue of the Library. Svo. London, 1865
London, Selenographical Society:
The Selenographical Journal; a monthly Bulletin of the Selenographical Society. Vol. 1-5. 8vo. London, 1879-83
London, Society of Arts:
—: Journal. Vol. 12–32. Svo. London, 1864 84
—: Index to Vols. 21–30. 8vo. London, 1884
London, University College Library: Catalogue of books. 3 vols. 8vo. London, 1879
Long (Roger): Astronomy, in five books. 2 vols. 4to. Cambridge, 1742-85
Longitude:
: An account of the proceedings, in order to the discovery of the longitude: in a letter to the Right Honourable * * * *,
Member of Parliament. 4to. London, 1763 : *Longitude by Telegraph. 8vo. 1882
Longomontanus (Christianus Severinus):
: Cyclometria ex lunulis reciprocè demonstrata, unde tam
areæ quam perimetri circuli exacta dimensio, & in numeros diductio sequuta est, hactenus ab omnibus mathematicis
unicè desiderata. 4to. Hafniæ, 1612 —— : Disputatio philosophica que secunda astronomiæ est, de
Sphæræ cælestis legitima constitutione, officio, & multiplici
utilitate. [Inaug. Dissert.: præside C. S. L] 4to. Hafniæ, 1612
— : Astronomia Danica in duas partes tributa, quarum
prior doctrinam de diurna apparente siderum revolutione
super sphera armillari veterum instaurata, duobus libris explicat : posterior, theorias de motibus planetarum

Longomontanus (Christianus Severinus)—continued.
complectitur. Cum appendice de asscititiis cœli phæno-
menis, nempe stellis novis et cometis.
4to. Amsterodami, 1622
: Ditto. 2 parts in 1 vol. fol. Amsterdami, 1640
Longstreth (Miers Fisher):
*On the accuracy of the tabular longitude of the Moon, to be
obtained by the construction of new lunar tables.
4to. Philadelphia, 1851
Loomis (Elias):  —: The recent progress of Astronomy; especially in the United
States. 8vo. New York, 1850
- : An introduction to practical astronomy, with a collection
of astronomical tables.  8vo. New York, 1855
: Ditto. 7th edition. Svo. New York, 1880
: A treatise on astronomy. 8vo. New York, 1866
- : Elements of astronomy, designed for academies and higher
schools. 8vo. New York, 1869
——: *Contributions to meteorology, papers 8–19.  Syo. New Haven, 1878–83
: Mémoires de météorologie dynamique; exposé des résul-
tats de la discussion de cartes du temps des États-Unis,
ainsi que d'autres documents, traduits par M. H.
Brocard. Svo. Paris, 1880
Loomis (Francis E.):
Periodic Stars. Inaugural Dissertation. 4to. Göttingen, 1869
Lopes (Antonio de Castro):
Memoria sobre a possibilidade e conveniencia da suppressão
dos annos bissextos, escripta em Portuguez, Latim e
Francez. 8vo. Rio de Janeiro, 1881
Lorek (Emil Franz):
Die Bahn der Semele. [Inaugural-Dissertation.]
8vo. Königsberg, 1868
Lorenzoni (Giuseppe):
: *Sull' eclisse totale del sole dell' 11 Dicembre 1871: Calcolo preparatorio. Svo. Venezia, 1871
Calcolo preparatorio. 8vo. Venezia, 1871  —: *Sulla eclisse parziale di sole del 26 Maggio 1873.
8vo. Venezia, 1873
: *Di un mezzo atto a rendere visibile tutta in una volta una
immagine monocromatica completa della cromosfera e delle
protuberanze solari. 8vo. Venezia, 1874
: Giovanni Santini, la sua vita e le sue opere. Discorso
letto nella chiesa di S. Sofia in Padova. 8vo. Padova, 1877
: *Sulla determinazione delle coordinate angolari, mediante
gli strumenti astronomici, e in particolare sullo strumento dei passaggi. 8vo. Venezia, 1878
dei passaggi. 8vo. Venezia, 1878 ——: *Sull' andamento del pendolo di Frodsham N. 1604, pos-
seduto dal R. Osservatorio di Padova. 8vo. Ven ezia, 1881
*Sulle osservazioni della Cometa b (III.) 1881 fatte al R.
Osservatorio di Padova. 8vo. Venezia, 1882
- *L' Astronomia in questi ultimi tempi. 8vo. Venezia, 1882

Lorenzoni (Giuseppe)—continued. ---: \*Sulle determinazioni di tempo eseguite ad Arcetri nell' autunno del 1882, colla osservazione dei passaggi di stelle pel verticale della Polure. 8vo. Venezia, 1884 Lorgna (Anton Maria): A dissertation on the summation of infinite converging series with algebraic divisors. . . . Translated . . . . with notes and observations. To which is added an appendix, containing all the most elegant and useful Formulæ which have been investigated for the summing of the different orders of series . . . . by H. Clarke. 4to. London, 1779 Loseby (E. T.): ——: On the phenomena of meteors. 12mo. Leicester, n.d. ——: Improvements in time-keepers. 8vo. London, n.d. Lossius (Lucas): Cisio Janus, hoc est kalendarium syllabicum. 4to. Wittebergae, 1551 Löw (Moritz), see Berlin, K. preuss. geodät. Institut. Löw (Moritz) et E. Plantamour: Différence de longitude entre Genève et Strasbourg. 4to. Genève, 1879 Lowe (Edward Joseph): -: Prognostications of the weather, or signs of atmospheric 8vo. London and Nottingham, 1840 —: Natural phenomena and chronology of the seasons. 8vo. London, 1870 Lowe (Edward Joseph) and A. S. H. Lowe: The climate of Nottingham during the year 1852. 8vo. London, 1853 Lubbock (John W.): —: \*On the comparison of various tables of annuities. 4to. Cambridge, 1820 ---: Account of the 'Traité sur le flux et reflux de la mer' of Daniel Bernoulli; and a treatise on the attraction of ellip-Svo. London, 1830 -: On the determination of the distance of a comet from the earth, and the elements of its orbit. 8vo. London, 1832 —: Ditto. New edition. 8vo. London, 1835 -: On the theory of the Moon, and on the perturbations of Svo. London, 1833 the planets. -: Ditto. New edition. 8vo. London, 1834 - : An elementary treatise on the computation of eclipses and 8vo. London, 1835 occultations. ---: On the theory of the Moon, and on the perturbations of the planets. Part 2, 3, 6 10. 8vo. London, 1836 60 — : An elementary treatise on the Tides. 8vo. London, 1839 ——: On the heat of vapours and on astronomical refractions. Svo. London, 1840

-: On the determination of the coefficients A and B in the development of  $\{1 - A \cos a\} = 1$  and  $\{1 - A \cos a\} = 1$ .

8vo. London, 1849

Lubienietski (Stanislaus de):
: Theatrum cometicum, duabus partibus constans, quarum altera Cometas anni 1664 & 1665, variis virorum
per Europam clariss., cum quibus auctor de hoc argumento contulit, observationibus [&c.]exhibet altera
continet historiam coccexy cometarum a tempore diluvii ad ann. 1665. 2 parts, in 2 vols. fol. Amstelodami, 1668-66 ——: Ditto. 2 parts, in 2 vols. fol. Lugduni Batavorum, 1681
Ludlam (John):
Astronomical Observations made in St. John's College, Cambridge, in the years 1767 and 1768; with an account of several astronomical instruments. 4to. Cambridge, 1769
Ludlam (William):
<ul> <li>*An account of a balance of a new construction, supposed to be of use in the woollen manufacture. 4to. London, 1766</li> <li>*Mathematical essays The second edition, with additions.</li> <li>Svo. Cambridge, 1787</li> </ul>
— : The rudiments of mathematics, designed for the use of students at the Universities. Third edition.
Svo. London, 1790
Luigi (Maschi):  Leggi della rotazione diurna planetare in rapporto colla gravitazione universale e colla circumvallazione orbitale.  Svo. Parma, 1876
Lund, Observatorium:
: *Planet- och Komet-Observationer anställda År 1867-72 utgivna af Axel Möller. 4to. Lund, 1868-73: *Einige Resultate aus den meteorologischen Beobachtungen
angestellt auf der Sternwärte zu Lund in den Jahren 1741-
1870; von A.V. Tidblom. 4to. Lund, 1876  ——: Beobachtungen des Mars während seiner Opposition 1877, angestellt von A. Lindstedt. 4to. Lund, 1878
: See Dunér; Lindstedt; Möller.
Lundahl (Gustaf):  De numeris nutationis et aberrationis constantibus atque de
parallaxi annua stellae polaris. [Inaugural Dissertation.] 4to. Helsingforsiae, 1842
Luther (Eduard): : Berechnung der auf der Königsberger Sternwarte in der
Jahren 1830 bis 1838 gemachten Beobachtungen der Planeten Merkur, Venus, Mars, Jupiter und Saturn. 4to. Königsberg, 1849
— : Declinationes stellarum fundamentalium novae ex ultimi illi Bessel Observationibus derivatae [Inaugural Dis
sertation.] 4to. Regiomonti Pr. 1859 ——: *Das Klima von Königsberg. 4to. Königsberg, 186.
Luvini (Giovanni):
: *Le diéthéroscope. Svo. Turin, 1870
: *Presentazione di un modello di dieteroscopio De

Luyts (Joannes):

Astronomica institutio, in qua doctrina sphærica atque theorica, intermixto usa sphæræ cælestis, & variis chronologicis, pertractantur. 4to. Trajecti ad Rhemm, 1692

Lycosthenes [or von Rufaeh] (Conrad):

Prodigiorym atque ostentorum tam cœlestium quam terrestrium Chronicon, ab exordio mundi usq: ad nostra tempora.

fol. Basileæ, 1557

Port.	101. Dashere, 1557
Lydyat (Thomas):	
Prælectio Astronomica de natvra celi mentorum ; tum autem de causis p	præcipuorum motuum
cæli et stellarum. Item disquisitio p fontium perennium frigidorum et cal	
Lynn (Thomas):	8vo. Londini, 1605
: Horary tables, for finding the time 1	y inspection, to facili-
tate the operations for obtaining the	he longitude at sea by
chronometers and lunar observations  : New star tables, adapted to practical	l purposes for twenty-
two years, commencing January 1843	3. 8vo. London, 184?
Lynn (William Thynne):	
— : The first principles of natural philosop — : Celestial motions; a handy book of a	dry. 8vo. London, 1863 estronomy.
, coronavir and a second	8vo. London, 1884
—: Ditto. Second edition.	8vo. London, 1884
: See also Main (R.)	
Lyons (Israel):	
A treatise of fluxions.	Svo. London, 1758
Macelesfield (the Earl of):	43 3 6
: *Remarks upon the solar and the lu- 19 years, commonly called the golde	nar years, the cycle of
and a method of finding the time of I	Easter.
	4to. London, 1750
: Speech in the house of Peers, Man	rch 18, 1750, at the
second reading of the bill for regul	
ment of the year.	4to. London, 1751
: Correspondence of scientific men of	Planut and Wallie and
tury, including letters of Barrow, I Newton, printed from the originals i	n the collection of the
Earl of Macclesfield. [Edited by Pr	of, Rigand.]
2 V	ols. 8vo. Oxford, 1841
: Ditto. Contents by A. De Mo	organ.
Madonald (James)	8vo. Oxford, 18.12

#### Macdonald (James):

The origin and the destiny of comets; or a change in the ecliptic of the earth.

Svo. Prahran, 1869

McGrigor (D.):

---: An analytical calculation of the Solar Eclipse, for the seventh of September, 1820. Svo. Glasgow, 1820

---: An essay on the determination of the elements of the orbits of comets and planets.

8vo. Glasgow, 1833

Machin (John), see Maseres (F.); Newton (Isaac).
Mackay (Andrew):
— : The theory and practice of finding the longitude at sea or
land, to which are added various methods of determining
the latitude of a place, and variation of the compass, with
new tables. 2 vols. in 1, 8vo. Aberdeen, 1801  —: The complete navigator, or an easy and familiar guide to
the theory and practice of navigation, with all the requisite
tables, &c., &c. 8vo. London, 1804
Mackey (John):
A method of finding a cube double of a cube, founded on the
principles of elementary geometry. 8vo. Dublin. 1824
Mackey (Sampson Arnold):
— : The mythological astronomy of the ancients demonstrated, by restoring to their fables and symbols their original
meanings. 2 parts in 1 vol. 8vo. Norwich, 1822-23
-: The original design of the ancient Zodiacal and extra-
Zodiacal constellations, arranged on the present globes.
8vo. Norwich, 1834
Mackinlay (G.):
*The transit of Venus in 1882. Svo. Woolwich, 1883
Mackintosh (Thomas S.):
*Electrical theory of the universe. 8vo. London, 1835-36
Maclaurin (Colin):
: Geometria organica, sive descriptio linearum curvarum
universalis. 4to. Londini, 1720
: A treatise of fluxions: in two books.
2 vols. 4to. Edinburgh, 1742
- : An account of Sir Isaac Newton's philosophical discoveries
published from the author's manuscript papers by Patrick Murdoch. 4to. London, 1748
-: Ditto. Third edition. 400. London, 1775
: A treatise of algebra, in three parts, containing:—I. The
fundamental rules and operations. II. The composition
and resolution of equations III. The application
of algebra and geometry to each other; To which is added
an appendix, concerning the general properties of geo-
metrical lines. Fourth edition. 8vo. London, 1779
Maclear (Thomas):
: *Observations of Halley's Comet, made at the Royal Ob.
servatory, Cape of Good Hope, in the years 1835 and 1836.
4to. London, 1837
: *Contributions to Astronomy and Geodesy.
2 parts] 4to. London, 1851-53  —: Verification and extension of La Caille's Arc of Meridian
· · · · · · · · · · · · · · · · · · ·
at the Cape of Good Hope. 2 vols. 4to. London, 1866 ——: See also Cape of Good Hope, Royal Observatory.
Maclot (J. Ch.):
Mappemonde céleste, ou exposition des principes astrono-
miques relatifs au globe terrestre et à la connoissance géné- rale du ciel. Svo. Paris, 1801
rale du ciel. 8vo. Paris, 1801

#### Macovius (Daniel Polydorus) et Benjamin Oswaldus: Exercitatio astronomica exhibens locum, motum, magnitudinem, causas, effectus & significationes cometie. [Inaugural Dissertation. 4to. Gedani, 1653 Maddy (W.): The elements of the theory of astronomy . . . . A new edition, revised and greatly enlarged, by J. Hymers . . . . Svo. Cambridge, 1832 Madison, Washburn Observatory of the University of Wisconsin: -: Contributions, Number 1. (List of new nebulæ and double 4to. Madison, 1881 ---: Publications . . . . (under the superintendence of E. S. Holden). Vol. 1. Svo. Madison, 1882 Mädler (Johann Heinrich von): — : Kurzgefasste Beschreibung des Mondes. Ein Auszug aus der grösseren Selenographie von W. Beer und J. II. 8vo. Berlin, 1839 Mädler. - : Astronomische Briefe. Svo. Mitau, 1846 4to. Dorpat, 1846 — : Die Centralsonne. — : Untersuchungen über die Fixstern-Systeme. Erster Theil. Die partiellen Systeme. Zweiter Theil. Das allgemeine fol. Mitau und Leipzig, 1847-1848 --: Tabula generalis stellarum duplicium indicationem motus gyratorii exhibentium. obl. fol. Dorpati, 1849 - : Sonne und Mond. 8vo. Leipzig, 1852 — : Der Fixsternhimmel. Eine gemeinfassliche Darstellung der neuern auf ihn sich beziehenden Forschungen. 8vo. Leipzig, 1858 --: Die Fixsternwelt . . . Zweite Auflage des Werkes: Ueber die Fixsterne im Allgemeinen und die Doppelsterne insbesondere. Svo. Berlin, 1861 ---: Der Wunderbau des Weltalls, oder populäre Astronomie . . . . Nebst einem Atlas, astronomische Tafeln, Abbildungen und Sternkarten enthaltend. Fünfte Auflage. 8vo. (atlas in fol.). Berlin, 1861 - : \*Über totale Sonnenfinsternisse mit besonderer Berücksichtigung der Finsterniss vom 18 Juli 1860. [Mit Nach-4to. Jena, 1861-62 trag. --: Kurzer Abriss der Astronomie. 8vo. Essen, 1863 ——: Reden und Abhandlungen über Gegenstände der Himmels-Svo. Berlin, 1870 — : Geschichte der Himmelskunde von der ältesten bis auf die 2 vols. 8vo. Braunschweig, 1873 neueste Zeit. --: Der Mond, &c., see Beer und Mädler. ---: Dorpat Beobachtungen, see Dorpat, Sternwarte.

Madras Literary Society:

The Madras Journal of Literature and Science, 1836–40.
Vol. 4–12.

8vo. Madras, 1836–40

Madrag Obganyatany
Madras Observatory:  ——: Observed transits of the fixed stars and planets over the
movidian 1812 14 [I Coldingham] fol [Mulvas]
meridian, 1812–14. [J. Goldingham.] fol. [Madras] ——: Madras Observatory papers, by J. Goldingham.
fol. Madras, 1827
-: Result of astronomical observations made by T. G.
Taylor, 1831–47. Vol. 1-6. 4to, Madras, 1832 48
Taylor, 1831–47. Vol. 1–6. 4to. Madras, 1832 48  —: Astronomical Observations made by W. K. Worster
and W. S. Jacob, for the years 1848-52, 4to. Madras, 1854
— : A general catalogue of the principal fixed stars from obser-
vations made in the years 1830-43, by T. G. Taylor.
4to. Madras, 1844
: *A subsidiary Catalogue of 1440 stars selected from the
British Association Catalogue, reduced to January 1st, 1850,
from observations made at Madras in the years 1849-53.
[W. S. Jacob.] 4to. (Madras, 185.4): Meteorological Register by J. Goldingham and T.
G. Taylor, 1822–43. fol. Madras, 1844
: Meteorological Observations, 1841–45.
—: Ditto, by T. G. Taylor, W. K. Worster, and W. S. Jacob,
in the years 1846-50. 4to, Madras, 1854
: Magnetical Observations made by T. G. Taylor, W.
K. Worster, and W. S. Jacob, in the years 1846-50.
4to. Madras, 1854
—: Meteorological Observations made under the superinten-
dence of W. S. Jacob, in the years 1851-55. 4to. Madras, 1874
: Report of the Government Astronomer upon the proceed-
ings of the Observatory, in connexion with the total Eclipse
of the Sun on August 18th, 1868, as observed at Masuli- patam, Vunpurthy, Madras, and other stations in Southern
India. 8vo.
-: Administration Reports for the Madras Observatory and
Meteorological Departments for 1875. By N. R. Pogson.
fol. Madras, 1877
Madrid, Real Academia de Ciencias:
—: Memorias. Tomo 1-4, 5 (p. 1), 6 (p. 1, 2).
4to. Madrid, 1850–65
: Resumen de las Actas, 1847-63. 8vo. Madrid, 1848-64
Madrid, Real Observatorio:
: Instruccion sobre el eclipse de sol, que ha de verificarse el
18 de Julio de 1860. 4to. Madrid, 1860
— : Comunicacion del director al comisario régio del
mismo, participándole los principales resultados obtenidos
en la observacion del eclipse de sol del 18 de Julio (1860)
en el Desierto de las Palmas. 8vo. Madrid, 1860
: *Observacion del eclipse de sol del 6 de Marzo de 1867. 4to. Madrid, 1867
—: Observaciones Meteorológicas, 1863–78.
8vo. Madrid, 1865-79
- : Resumen de las observaciones meteorológicas efectuadas en
la Península, 1866–75. Svo. Madrid, 1868–78
: Anuario, año 2-17. 1861-79. Svo. Madrid, 1860-78

## Mæstlinus (Michael): —: Epitome astronomia, qua brevi explicatione omnia, tam ad sphæricam quam theoricam eius partem pertinentia, ex ipsius scientia fontibus deducta, perspicue per quæstiones traduntur. 8vo. Tubinga, 1610 -: Ditto. 8vo. Tubingae, 1624 Magellan (Jean Hyacinthe de): Collection de différens traités sur des instrumens d'astronomie, physique, &c. 4to. Londres, 1780 Maginus (Joannes Antonius): Novæ cælestium orbium theorieæ congruentes cum observa-4to. Venetiis, 1589 tionibus N. Copernici. Magnaghi (G. B.): Gli Strumenti a riflessione per misurare angoli. Svo. Milano, 1875 Mailly (Édouard): ---: \*Relation d'un voyage fait en Sicile et dans le midi de l'Italie. 12mo. Bruxelles, 1859 —: \*Précis de l'histoire de l'astronomie aux Etats-Unis d'Amérique. 12mo. Bruxelles, 1860 — : \*Essai sur les institutions scientifiques de la Grande-Bretagne et de l'Irlande. Partie 1, 3, 5, 6. 12mo. Bruxelles, 1861-67 —: \*L'Espagne scientifique. 12mo. Bruxelles, 1868 ----: De l'astronomie dans l'Académie Royale de Belgique: rapport séculaire (1772-1872). 8vo. Bruxelles, 1872 — : \*Tableau de l'astronomie dans l'hémisphère austral et dans Svo. Bruxelles, 1872 l'Inde. —: \*Adolphe Quetelet. 8vo. Bruxelles, 1874 ---: Essai sur la vie et les ouvrages de L. A. J. Quetelet. 12mo. Bruxelles, 1875 12mo. Bruxelles, 1880 — : \*Notice sur Ernest Quetelet. Main (Robert): - : Practical and spherical astronomy, for the use chiefly of students in the Universities. 8vo. Cambridge, 1863 ---: Rudimentary astronomy: third edition, revised and corrected to the present time by William Thynne Lynn. 8vo. London, 1882 ——: See Greenwich Observatory; Oxford, Radcliffe Observatory. Mairan (Jean Jacques Dortous de):

Traité physique et historique de l'aurore boréale. (Suite des Mémoires de l'Académie, 1731.) 12mo. Amsterdam, 1735

#### Malcolm (Alexander):

A new system of arithmetick, theoretical and practical, wherein the science of numbers is demonstrated.

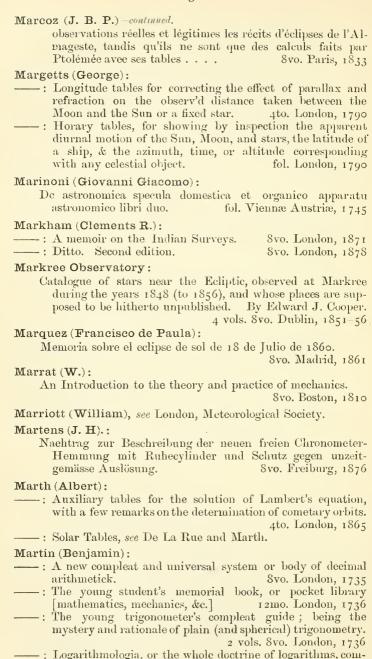
4to. London, 1730

Manchester, Chetham Library:

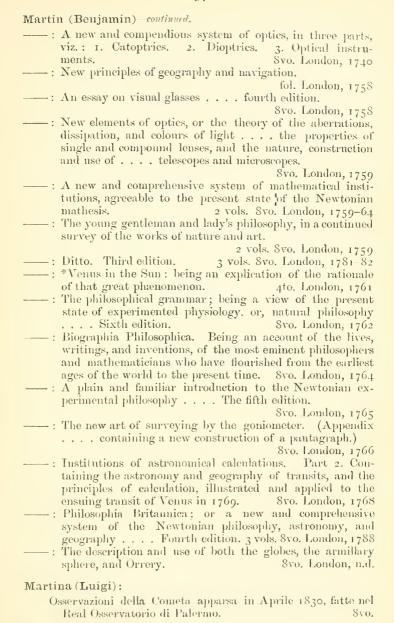
Bibliotheca Chethamensis. 3 vols. 8vo. Mancunii, 1791-1826

Manchester Free Public Libraries:
: Annual Report, 1859-84. 8vo. Manchester
—: Catalogue of the books in the Reference Department.
4to. London, 1864
Manchester Literary and Philosophical Society:
—: Memoirs, second series. Vol. 6-15. 8vo. London, 1842-60
Vol. 12 contains Index to the 17 vols, of the Memoirs (Vol. 1 old series to
Vol. 12 new series).
— : Memoirs, third series. Vol. 1-7. 8vo. London, 1862-82
- : Proceedings, Vol. 1-22. 8vo. Manchester, 1857-83
: Rules. 8vo. Manchester, 1861
: Catalogue of the books in the Library. 8vo. Manchester, 1875
: A centenary of science in Manchester. By R. Angus
Smith. 8vo. London, 1883
Mandey (Venterus):
Synopsis mathematica universalis, or a brief system of the
mathematics for young students, and such as have not
arrived to a great perfection in those studies.
8vo. London, 1709
Mandey (Venterus) and James Moxon:
Mechanick-powers, or the mistery of nature and art unvail'd,
showing what great things may be perform'd by mechanick
engines. 4to. London, 1696
Manetho:
Μανεθωνος Αποτελεσματικων βιβλια ΕΞ. Manethonis Apo-
telesmaticorum libri sex. Nunc primum ex bibliotheca
Medicea editi curâ Jacobi Gronovii, qui etiam Latine vertit
ac notas adjecit. 4to. Lugduni-Batavorum, 1698
Manfredi (Eustachio):
—: Instituzioni astronomiche. Opera postuma. (Opera di
Manfredi, tomo 2.) 4to. Bologna, 1749
— : De annuis inerrantium stellarum aberrationibus.
4to. Bononiæ, 1729
-: See Bologna, Ephemerides.
•
Manilius (Marcus):
- : Astronomicon ad Caesarem Augustum. 8vo. Lugduni, 1551
— : Astronomicωn libri qvinqve, Iosephys Scaliger Ivl. Caes. F.
recensvit, ac pristino ordini suo restituit.
8vo. Lutetiæ, 1579
— : Astronomicon, a Josepho Scaligero ex vetusto codice Gem-
blacensi infinitis mendis repurgatum; eiusdem Josephi
Scaligeri notæ. 4to. Lugduni Batavorum 1599
: Astronomicon, à Josepho Scaligero ex vetusto codice Gem-
blacensi infinitis mendis repurgatum; eiusdem Josephi
Scaligeri notæ accesserunt quædam Thomæ
Renesi et Ismaelis Byllialdi animaduersiones.
4to. Argentorati, 1655
- : The Sphere of Marcus Manilius made an English poem :
with annotations and an astronomical appendix. By
Edward Sherburne. fol. London, 1675

Manilius (Marcus)—continued.
. : Astronomicon; interpretatione et notis ac figuris illustravit M. Fayvus accesserunt P. D. Huetii animadver
siones et Scaligeri notas. 4to. Parisiis, 1679
—: Himmelskugel; Lateinisch und Deutsch, im Versmasze des Originals zum ersten Male übersetzt und mit Anmer- kungen begleitet von J. Merkel. 8vo. Aschaffenburg, 1844
Mann (Robert James):
<ul> <li>: Meteorological observations made at Pietermaritzburg during the years 1863-65.</li> <li>: The climate of Maritzburg, Natal.</li> </ul>
12mo. Pietermaritzburg, 1864
— : A guide to Astronomical Science. 8vo. London, n.d.
Mann (W. Wilberforce):
A new decimal metrical system founded on the earth's polar diameter. Svo. New York, 1872
[Mannevillette (d'Après de)]:
Description et usage d'un nouvel instrument pour observer la latitude sur mer, appellé le nouveau Quartier A nglois. Nouvelle édition [par M. Bory]. 12mo. Paris, 1751
· Mannheim, Grossherzogliche Sternwarte:
: Astronomische Beobachtungen Angestellt und her- ausgegeben von E. Schönfeld (und W. Valentiner).
Abtheilung 1-3. 4to. Mannheim, Karlsruhe, 1862-79
tiner. I. Beobachtungen am Passageninstrument im Jahre 1805. 8vo. Mannheim, 1878
— : Die Sternwarte zu Mannheim, beschrieben von ihrem Curator (J. L. Klüber). 4to. Mannheim, 1811
-: See also Mayer (C.)
Manning (Thomas):
An introduction to arithmetic and algebra. 2 vols. in 1, Svo. Cambridge, 1796–98
Marcoz (J. B. P.):
: Astronomie Solaire d'Hipparque, soumise à une critique rigoureuse, et ensuite rendue à sa vérité primordiale.  8vo. Paris, 1828
— : Astronomie solaire simplifiée, fondée sur les observations
tant anciennes que du moyen âge, et prouvant l'exclusion des variations séculaires théoriques introduites dans les
calculs des lieux du soleil. 8vo. Paris, 1832
: Réfutation de la critique du livre intitulé astronomie
solaire d'Hipparque, par J. B. P. Marcoz, insérée par M. Letroune dans le Journal des Savants, 1828-29.
8vo. [Paris, 1832] —: Erreur des astronomes et des géomètres d'avoir admis
l'accélération séculaire de la lune, en prenant pour des



mon and logistical, in theory and practice. Svo. London, 1740



# Mascheroni (L.):

Géométric du compas . . . . Ouvrage traduit de l'Ital'en par A. M. Carette. 8vo. Paris, 1798

Maseres (Francis):
- : A dissertation on the use of the negative sign in algebra
shewing how quadratic and cubic equations may be
explained, without the consideration of negative roots
To which is added Mr. Machin's Quadrature of the Circle.  4to, London, 1758
Circle. 4to. London, 1758 ——: Elements of plane trigonometry; in which is introduced a
dissertation on the nature and use of logarithms.
8vo. London, 1760
: The principles of the doctrine of life-annuities explained in
a familiar manner with a variety of new tables.
8vo. London, 1783  ——: Scriptores logarithmici, or a collection of several curious
tracts on the nature and construction of logarithms.
6 vols. 4to. London, 1791–1807
: The doctrine of permutations and combinations, being an
essential and fundamental part of the doctrine of chances.
as it is delivered by James Bernoulli in his Ars
Conjectandi, and by John Wallis with some other useful mathematical tracts. Syo. London, 1795
useful mathematical tracts. 8vo. London, 1795 ——: Tracts on the resolution of affected algebräick equations
by Dr. Halley's, Mr. Raphson's, and Sir Isaac Newton's
methods of approximation. 8vo. London, 1800
: Tracts on the resolution of cubick & biquadratick equa-
tions. 8vo. London [1803]
—: [Scriptores optici]: J. Gregory, Optica promota; R. Des Cartes, Dioptrice, Explicatio ovalium optice inservientium,
cum notis F. à Schooten; Extrait du traité de Huyghens
sur la lumière; C. Rabuel, figures des verres; Excerpta ex
lib. 2 geometriæ, R. Des Cartes. Vol. 1. 4to. London, 1823
Maskelyne (Nevil):
: *Concise rules for computing the effects of refraction and
parallax, in varying the apparent distance of the Moon
from the Sun or a star; also an easy rule of approximation
for computing the distance of the Moon from a star, the longitudes and latitudes of both being given.
4to. London, 1765
: Instructions relative to the observation of the ensuing
transit of the planet Venus over the Sun's disk, on the 3d
of June 1769. 8vo. London, 1768
: *Observations of the transit of Venus over the Sun, and the eclipse of the Sun on June 3, 1769, made at the Royal
Observatory. 4to. London, 1769
: Tables for computing the apparent places of the fixt stars,
and reducing observations of the planets. fol. London, 1774
— : Tables requisite to be used with the Nautical Ephemeris for
finding the latitude and longitude at sea The second
edition. 8vo. London, 1781 ——: Ditto. Third edition. 8vo. London, 1802
: Ditto. Appendix to the third edition, being new
tables of natural sines, natural versed sines, and logarithms
of numbers. 8vo.

Maskelyne (Nevil)—continued.

---: \*Advertisement of the expected return of the Comet of 1532 and 1661 in the year 1788. 4to. London, 1786

\*An attempt to explain a difficulty in the theory of vision,

depending on the different refrangibility of light.

4to. London [1789]

: An answer to a pamphlet entitled 'a narrative of facts,' lately published by Mr. Thomas Mudge, junior, relating to some time-keepers constructed by his father, Mr. Thomas Mudge.

Svo. London, 1792

---: See Greenwich, Royal Observatory; Hertzsprung (S.)

## Mason (Ebenezer Porter):

\*Observations on nebulæ with a fourteen feet Reflector, made by H. L. Smith and E. P. Mason during the year 1839. 4to. Philadelphia, 1841

## Massimo (M.):

\*Eclisse Solare del 18 Luglio 1860 osservata in Roma, e calcolata da M. M. . . . . . . . . . 4to. Roma, 1860

# Massucci (Nicolo):

Discorso . . . . della correttionne dell' Anno, & del nuovo Calendario. Svo. Roma, 1583

# Matalène (P.):

L'anti-Copernic. Astrométrie nouvelle, suivie de plusieurs problèmes. 8vo. Paris, 1842

Mathematical magazine and philosophical repository, containing a variety of original pieces in all parts of mathematical science, by G. W. Witchell, T. Moss, &c. Vol. 1.

Svo. London, 1761

Mathematical Monthly. Edited by J. D. Runkle. Vol. 1. 4to. Cambridge [Mass.], 1859

Mathematical Science (further researches in). . . . By the author of 'the two discoveries.' Svo. Bridgwater, 1875

Mathematical Transactions and Collections; with a methodical history of mathematics; by a society of gentlemen.

No. 1.

4to. London, 1762

Mathematician (the), containing many curious dissertations on the rise, progress, and improvement of geometry . . . . with a collection of . . . . problems. By a society of gentlemen. 8vo. London, 1751

Mathematician (the). Edited by T. S. Davies, W. Rutherford, and S. Fenwick. 3 vols. 8vo. London, 1845-50

Mathematische und naturwissenschaftliche Berichte aus Ungarn: mit Unterstützung der Ungarischen Akademie [&c.] Redigirt von J. Frölich. Band 1. 8vo. Berlin, 1882-83

#### Matthes (Carolus Johannes):

Dissertatio mathematica de invenienda aequatione Causticarum.
[Inaugural Dissertation.] 4to. Lugduni Batavorum, 1837

Matthews (Thomas):

A mode of trisecting a plane rectilineal angle, for 2,000 years reputed impossible, by the use of circles and straight lines only. 8vo. Horsham, 1875

Matthiessen (E. A).:

Tabula ad expeditiorem calculum logarithmi summae vel differentiae duarum quantitatum, per logarithmos tantum 4to. Altonae, 1818 (1817) datarum. [Lat. & Ger.]

Mauduit (A. R.):

A new and complete treatise of spherical trigonometry . . . . Translated by W. Crakelt. 8vo. London, 1768

Maughan (W. K.):

On the barometer and tides. 8vo. London, 1863

Maupertuis (Pierre Louis Moreau de):

- ---: The figure of the earth, determined from observations made by order of the French King at the Polar Circle, by de Maupertuis, Camus, Clairaut, Le Monnier, Outhier, and Celsius. Svo. London, 1738
- -: Astronomie Nautique, ou élémens d'astronomie, tant pour un observatoire fixe, que pour un observatoire mobile.
- 8vo. Paris, 1743 — : Ouvrages divers . . . . Éléments de Géographie. Discours sur les différentes figures des corps célestes. Discours sur la parallaxe de la lune, et lettre sur la comète.

12mo. Amsterdam, 1744 ——: Œuvres.—Nouvelle édition. 4 vols. 8vo. Lyon, 1768

- : See also Keill (J.)

Maupertuis (Pierre Louis Moreau de) et J. Picard [&c.]: Dégré du méridien entre Paris et Amiens, déterminé par la mesure de M. Picard, et par les observations de M<sup>rs</sup> de Maupertuis, Clairaut, Camus, Le Monnier, 8vo. Paris, 1740

Maurice (George):

Discours sur l'histoire de la mesure du temps. 8vo. Genève, 1831

Maurolycus (Franciscus):

— : Cosmographia . . . . in tres dialogos distincta; in quibus de forma, situ, numeroque tam cœlorum quam elementorum, aliisque rebus ad astronomica rudimenta spectantibus satis disseritur. 4to. Venetiis, 1543

---: Opuscula mathematica. 4to. Venetijs, 1575

Maury (M. F.):

- ---: Explanations and sailing directions to accompany the wind and current charts. Third edition, 4to, Washington, 1851
- -----: Ditto. Fourth edition. 4to. Washington, 1852 -----: Ditto. Eighth edition. 2 vols. 4to. Washington, 1858-59

Maury (M. F.) and J. M. Gilliss:

Circular . . . in relation to the Astronomical Expedition to (Table I. Ephemeris of Venus and her stars of comparison, 1850 & 1852. Table II. Ephemeris of Mars and its stars of comparison, 1849 and 1852. By Lieut. J. M. Gilliss.) 4to. Washington, 1849

Maxwell (Alexander):
Plurality of Worlds: or letters, notes, & memoranda, philo-
sophical and critical; occasioned by 'a series of discourses
on the christian revelation, viewed in connection with the
modern astronomy, by Thomas Chalmers, D.D.' 8vo. London, 1820
Maxwell (James Clerk):
—: Theory of heat. Second edition. Svo. London, 1872
: Remarks on Professor Hamilton's paper, 'A law of elliptic
motion.' Svo. Liverpool, 1873
Mayer (Alfred Marshall):
—: Lecture-notes on physics. Svo. Philadelphia, 1868
: *The total Eclipse of August 7th, 1869.
8vo. Philadelphia, 1869
: *Observations on the variation of the magnetic declination
in connection with the Aurora of October 14, 1870. 8vo. New Haven, 1871
: *Observations on the planet Jupiter.
8vo. Philadelphia, 1870
Mayer (Christian):
—: De novis in coelo siderco Phaenomenis in miris stellarum
fixarum comitibus Manuhemii in Specula nova Electorali
recens detectis. 4to. Mannhemii, 1779: Solis et Lunæ eclipseos observatio astronomica
facta Schwezingæ in Specula nova Electorali anno 1764
diebus 17 Martii et 1 Aprilis. 4to. Mannheimii, n.d.
Mayer (Joannes Tobias):
: Theoria lunæ juxta systema Newtonianum.
4to. Londini, 1767
: Tabulæ motuum solis et lunæ novæ et correctæ quibus
accedit methodus longitudinum promota. [Edidit N. Mas-
kelyne.] 4to. Londini, 1770
: Opera Inedita. Vol. 1. Commentationes Societati Regiae
Scientiarum oblatas, quae integrae supersunt, cum tabula selenographica complectens. Edidit et observationum
appendicem adjecit Georgius Christophorus Lichtenberg.
4to. Gottingae, 1775
: Commentatio de aberrationibus stellarum fixarum compu-
tandis. [Inaugural Dissertation.] 4to. Erlangae, 1787
— : Lunar Tables, improved by Charles Mason. 4to. London, 1787
: Lehrbuch über die physische Astronomie, Theorie der Erde und Meteorologie. 4to. Göttingen, 1805
und Meteorologie. 400, Gottiligell, 1805
- Astronomical Observations, made at Göttingen from 1756
: Astronomical Observations, made at Göttingen, from 1756
: Astronomical Observations, made at Göttingen, from 1756 to 1761. [Published by order of the Commissioners of
: Astronomical Observations, made at Göttingen, from 1756 to 1761. [Published by order of the Commissioners of Longitude, under the superintendence of F. Mossotti.] fol. London, 1826
: Astronomical Observations, made at Göttingen, from 1756 to 1761. [Published by order of the Commissioners of Longitude, under the superintendence of F. Mossotti.]  fol. London, 1826: *Catalogue of stars corrected and enlarged; together with a
: Astronomical Observations, made at Göttingen, from 1756 to 1761. [Published by order of the Commissioners of Longitude, under the superintendence of F. Mossotti.] fol. London, 1826: *Catalogue of stars corrected and enlarged; together with a comparison of the places of the greater part of them with
: Astronomical Observations, made at Göttingen, from 1756 to 1761. [Published by order of the Commissioners of Longitude, under the superintendence of F. Mossotti.]  fol. London, 1826: *Catalogue of stars corrected and enlarged; together with a

Я

Mayer (Joannes Tobias)-continued. Male herausgegeben von der Königl. Sternwarte zu Göttingen. [12 sheets of drawings.] Göttingen, 1881 Mayr (Aloys): Ueber die tangirenden Flächen erster und zweiter Ordnung. 4to. Würzburg, 1845 Mazure Duhamel (J. A.): Mémoire sur l'astronomie nautique. 4to. Paris, 1822 Méchain (Pierre François André) et J. B. J. Delambre: Base du système métrique décimal, ou mesure de l'arc du méridien compris entre les parallèles de Dunkerque et Barcelone. (Suite des Mémoires de l'Institut.) 3 vols. 4to. Paris, 1806-1810 Megerlin (Peter): Astrologische Muthmassungen von der Bedeutung des jüngst entstandenen Cometen, 1664. 4to. [Basel, 1665] Meibauer (R. O.): ---: Ueber die physische Beschaffenheit der Sonne. [Inaugural-Dissertation. 4to. Berlin, 1866 ---: Die Sternwarte zu Greenwich. 8vo. Berlin, 1868 ---: Der Novemberschwarm der Sternschnuppen. 8vo. Berlin, 1868 ---: Die physische Beschaffenheit des Sonnensystems. . . . Zweite Auflage. 8vo. Berlin, 1872 [Meibomius] (Marcus): De Proportionibus dialogus. fol. Hafniæ, 1655 Melander (Daniel) et Paolo Frisi: De theoria lunæ commentarii. 4to. Parmæ, 1769 Melanderhjelm (Daniel): Conspectus prælectionum academicarum, continens fundamenta astronomiæ. 2 vols. in 1, Upsaliæ, 1779 Melbourne, Flagstaff Observatory: -: Results of the meteorological observations taken in the colony of Victoria during the years 1859-62, and of the nautical observations collected and discussed at the Flagstaff Observatory . . . . during the years 1858-62. George 4to. Melbourne, 1864 Neumayer, Director. - : Discussion of the meteorological and magnetical observations made . . . . during the years 1858-63, by G. 4to. Mannheim, 1867 Neumayer. Melbourne, Williamstown Observatory: Astronomical Observations made . . . in the years 1861, 1862, and 1863, under the direction of Robert L. J. 8vo. Melbourne, 1869 Ellery. Vol. 1. Melbourne Observatory: ——: Third meteorological report. fol. Melbourne, 1858 -: Report of the Board of Visitors, together with the annual report of the Government Astronomer, 1859-83.

fol. Melbourne, 1859 83

Melbourne Observatory-continued.

Melbourne Observatory—continued.	
- : Results of astronomical observations made in the	)
years 1863-75, under the direction of Robert L. J. Ellery	
Vol. 2-5. 8vo. Melbourne, 1866-70	)
-: Results of Observations in meteorology, terrestrial mag	,
netism, &c., &c., during 1872, 1874-76, together	_
with abstracts from meteorological observations obtained	1
at various localities in Victoria. Under the superin	L
tonder of D. T. Ellens Well and C. M. P.	-
tendence of R. L. J. Ellery. Vol. 1, 3-5. 8vo. Melbourne	•
-: Monthly Record of results of observations in meteorology	,
terrestrial magnetism, &c., &c., taken under the	3
superintendence of R. L. J. Ellery, 1873-83. 8vo. Melbourne	
: First Melbourne general catalogue of 1227 stars for the	3
epoch 1870, deduced from observations extending from	1
1863 to 1870 made under the direction of Rober	t
L. J. Ellery Reduced and prepared for publication	ı
by E. J. White. 4to. Melbourne, 187.	1
: Observations of Mars and comparison stars taken	r
in the year 1877. Svo. Melbourne	
	,
Melbourne, Royal Society of Victoria:	
: Transactions of the Philosophical Society of Victoria, 1854	-
55. Vol. 1. 8vo. Melbourne, 185	Š
—: Transactions of the Philosophical Institute of Victoria	
1855–60. Vol. 1–4. 8vo. Melbourne, 1857–60	5
- : Transactions and Proceedings of the Royal Society of Vic	-
toria, 1860–82. Vol. 5–19. Svo. Melbourne, 1860–8	2
In 1855 the Philosophical Society of Victoria united with the Victoria	า
Institute, under the title of Philosophical Institute of Victoria, which	î
in 1860 became the Royal Society of Victoria.	
Melde (Franz):	
Theorie und Praxis der astronomischen Zeitbestimmung mi	Ŀ
Zugrundlegung vorbereitender Lehren, und unter Berück	U
sichtigung einfacher Hilfsmittel. 8vo. Tübingen, 1870	-
	,
Meldola (Raphael):	
*On a cause for the appearance of bright lines in the Solar	
spectrum. 8vo. London, 1878	)
Meldrum (Charles):	
-: *On the hurricanes and weather in the Indian Ocean, Jan	
and Feb. 1860. Svo. Mauritius	
: *Notes on the form of Cyclones in the Southern Indian	
Ocean, and on some of the rules given for avoiding their	
7.0	
Melloni (Macedonio):	
: *Elettroscopio del M M 4to. Napoli, 1854	
—: Elogio storico, see Nobile (A.)	

Tre libri della sostanza et forma del Mondo. 4to. Venetia, 1545

\*De l'application du Rhé-électromètre aux paratonnerres des

8vo. Bruxelles, 1877

Melsens (H. Louis F.):

télégraphes.

Memo (Giovanni Maria):

# Ménabréa (Louis Frédéric):

- ---: \*Mémoire sur la série de Lagrange. 4to. Turin, 1844
- ----: \*Mémoire sur les quadratures. 4to. Turin, 1844 ----: \*Observations sur la véritable interprétation de la série de
- ----: \*Observations sur la véritable interprétation de la série de Lagrange. 4to. Turin, 1847

# Mendoza y Rios (José de):

- ---: A complete collection of tables for navigation and nautical astronomy . . . . Second edition. 4to. London, 1809
- ----: Coleccion completa de tablas para los usos de la navegación y astronomía náutica. 4to. Madrid, 1850

# Mengoli (Pietro):

Geometriæ speciosæ elementa: de potestatibus à radice binomia & residua; de innumerabilibus numerosis progressionibus; de quasi proportionibus; de rationibus logarithmicis; de proprijs rationum logarithmis; de innumerabilibus quadraturis. 4to. Bononiæ, 1659

# Mercator (Gerardus):

Atlas, sive cosmographicæ meditationes de fabrica mundi et fabricati figura. Editio quarta. fol. Amsterodami, 1611

# Mercator [Kaufmann] (Nicolaus):

Institutionum astronomicarum libri duo, de motu astrorum communi et proprio, . . . . cum tabulis Tychonianis . . . . et Rudolphinis. . . . 2 parts in 1 vol. 8vo. Londini, 1676

# Mercier (Louis Sébastien):

De l'impossibilité du système astronomique de Copernic et de Newton. 8vo. Paris, 1806

# Merriman (Mansfield):

- : Elements of the method of least squares.
- 8vo. Cambridge, 1877

  ----: \*A list of Writings relating to the Method of Least Squares,
  with historical and critical Notes. 8vo. New Haven, 1877

#### Messahala:

De Elementis et orbibvs cœlestibvs liber antiqvvs ac eruditus
. . . . cui adiectum est scriptvm cvivsdam Hebræi de
Eris; . . . item ijsdem de rebus scriptvm cvivsdam
Saraceni, continens præterea præcepta ad usum tabularum
Astronomicarum utilissima . . . [edidit] J. Hellerus.
4to. Noribergæ, 1549

# Meteors:

Die Meteoriten Kreisreihen als Erzeuger der Kometen, Sonnenflecke, des Erdmagnetismus . . . u.s.w. 8vo. n.d.

# Metius (Adrian):

Astrolabium; hoc est astrolabii utriusque accurata descriptio. 8vo. Franckeræ, 1626

# Meyer (Arnold):

Zur Theorie der unbestimmten ternären quadratischen Formen. Inaugural-Dissertation. 8vo. Zürich, 1871 Meyer (J.):

Himmel und Erde oder des Verböl

Himmel und Erde oder das Verhältniss der Erde zum Fixsternhimmel, zur Sonne und zum Mond. Ein Lehrbuch für Schule und Haus. . . . Zweite Auflage.

8vo. Leipzig, 1855

## Meyer (Otto):

Ueber die Gestalt der Himmelskörper. (Programm der Realschule zu Königsberg.) 4to. Königsberg, 1869

### Meyer (Wilhelm):

---: \*Recherches sur Saturne, ses anneaux et ses satellites, d'après les observations faites à l'Observatoire de Genève pendant l'opposition de 1880. 4to. Genève, 1881

-: \*Sur l'enregistrement des battements de secondes d'une pendule au moyen du microphone. Svo. Genève, 1881 -: \*Mémoire sur la grande comète australe du mois de Février

\* Mémoire sur la grande comète australe du mois de Février 1880. 4to. Genève, 1882

## Meyer ( - ):

Kosmische Messungen. (Jahresbericht über das Gymnasium zu Bunzlau.) 4to. Bunzlau, 1868

## Mezger (Johann):

Tabulae aberrationis et nutationis in ascensionem rectam et declinationem insigniorum ccclii stellarum, cum aliis tabulis . . . . Cum præfatione Christiani Mayer.

8vo. Mannhemii, 1778

## Miari-Fulcis (Francesco):

\*Riduzione a comune misura dei massimi e minimi barometrici annuali osservati a Padova dal 1725 al 1881.

8vo. Venezia, 1882

#### Michell (John):

—: \*A recommendation of Hadley's quadrant for surveying.
4to. London, 1765

----: Proposal of a method for measuring degrees of longitude upon parallels of the aquator.

4to. London, 1767

- : An enquiry into the probable parallax and magnitude of the fixed stars, from the quantity of light which they afford us, and the particular circumstances of their situation. 4to. London, 1768

#### Michelson (Albert A.):

Experimental determination of the velocity of light. (Astronomical papers prepared for the use of the American Nautical Almanac.)

4to. Washington, 1880

## Middleton (Empson E.):

---: New process of measuring the height of the Sun.

8vo. London, 1874

## Middleton (J.):

----: A celestial atlas containing maps of all the constellations visible in Great Britain, with corresponding blank maps of the stars.

fol. London and Norwich, n.d.

---: A companion to the celestial atlas; being a series of lessons

Middleton (J.) -- continued.

on the constellations, a dissertation on the fixed stars, and conversations on the heavens. Second edition.

8vo. London, n.d.

#### Milan:

Effemeridi astronomiche. 1821, 1823–4, 1826–7, 1829–30, 1833–5, 1840–41, 1843–52, 1861. 8vo. Milano, 1820–1860

\*Milan (Livellazione della città). 8vo. Milano, 1834

## Milan, Reale Istituto Lombardo di Scienze e Lettere:

— : Memorie; classe di scienze matematiche e naturali. Vol. 10-12 (serie terza Vol. 1-3). 4to. Milano, 1867-73

----: Rendiconti. Classe di Scienze Matematiche e Naturali.
4 vols. 8vo. Milano, 1864-67

- : Rendiconti. Serie II. Vol. 1-6. 8vo. Milano, 1868-73

—: Annuario, 1864. 12mo. Milano.

## Milan, Reale Osservatorio:

----: Osservazioni sull' intensità e sulla direzione della forza magnetica istituite negli anni 1836–38 . . . . da C. Kreil e P. della Vedova. 8vo. Milano, 1839

— : Osservazioni meteorologiche eseguite . . . . negli anni 1848 al 1859 inclusivi dall' Abate Giovanni Capelli.

4to. Milano, 1861

---: See also Schiaparelli (G. V.)

## Milan, Reale Osservatorio di Brera:

Pubblicazioni. 1–23. 4to. Milano, 1873–83

#### Milberg (James Hermann):

Das wahre Sonnensystem. Bewegungen und Bahnen der Gestirne nach einer neuen Auffassung wie dieselbe im Himmelsraume, und zwar nicht in Ellipsen, statt hat.

8vo. München, 1862

#### Miller (J. F.):

\*Synopsis of meteorological observations made at Whitehaven, Cumberland, in the years 1849-52.

8vo. Edinburgh, 1850-53

## Miller (Samuel H.):

The Fenland Meteorological Circular and Weather Report, 1874-75. 4to. Wisbeach, 1874-76

## Miller (William Hallowes):

\*On the construction of the new Imperial standard pounds; on the comparison of the new standards with the Kilogramme des Archives [&c.] 4to. London, 1857

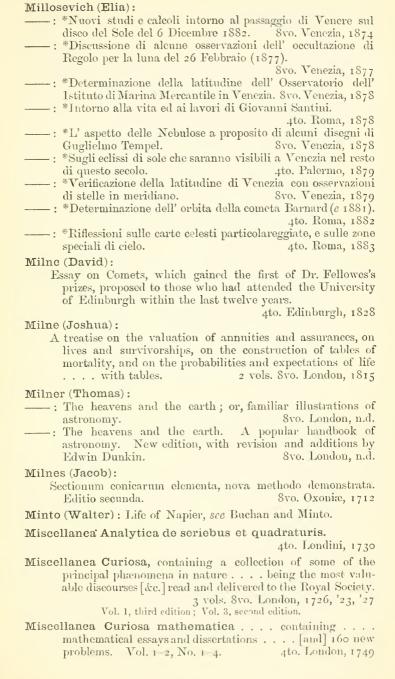
## Milliet Dechales (Claude François):

The Elements of Euclid explained . . . . Seventh edition. 8vo. London, 1726

## Millington (John):

An epitome of the elementary principles of natural and experimental philosophy. Part 1 . . . . Properties of matter, mechanics, pneumatics, acoustics, hydraulics.

8vo. London, 1823



Miscellaneæ Curiosæ, or entertainments for the ingenious of both sexes, for 1734-35.
6 parts in 1 vol. 8vo. York, 1734-35  Miscellanea Scientifica Curiosa; consisting of essays and dissertations on the most curious and interesting subjects in natural philosophy, speculative and mixed mathematics [&c.] By a society of gentlemen. No. 1-8.  4to. London, n.d.
Mitchel (Ormsby Macknight):  ——: The Sidereal Messenger, a monthly journal, devoted to astronomical science. Vol. 1-2, and Vol. 3, No. 1, 2.
<ul> <li>4to. Cincinnati, 1848</li> <li>Popular Astronomy. A concise elementary treatise on the sun, planets, satellites and comets. 8vo. New York, 1860</li> <li>The planetary and stellar worlds: a popular exposition of the great discoveries and theories of modern astronomy</li> <li> With additions by James Glaisher. 8vo. London, n.d.</li> </ul>
: See also Burritt (Elijah): Double stars, see Cincinnati Observatory.
Möbius (August Ferdinand): ——: De computandis occultationibus fixarum per planetas.
Dissertatio astronomica [inauguralis]. 4to. Lipsiae, 1815 —: Die wahre und die scheinbare Bahn des Halley'schen Kometen bei seiner Wiederkunft im Jahre 1835 anschaulich dargestellt und allgemein fasslich erklärt.
8vo. Leipzig, 1834  —: Die Elemente der Mechanik des Himmels, auf neuem Wege, ohne Hülfe höherer Rechnungsarten dargestellt.  8vo. Leipzig, 1843
: Die Hauptsätze der Astronomie zum Gebrauche bei seinen Vorlesungen für Gebildete zusammengestellt. Sechste Auflage. 8vo. Stuttgart, 1874
: See also Leipzig, Sternwarte.
Modena, R. Osservatorio Astronomico:
Atti raccolti e ordinati da Giuseppe Bianchi. Tomo 1. fol. Modena, 1834  Modena, Società Italiana delle Scienze:
: Memorie di Matematica e di Fisica. Tomo 19-25 4to. Modena, 1821-55
-—: Ditto. Serie seconda. Tomo 1, 2. 4to. Modena, 1862–66: Ditto. Serie terza. Tomo 1–5.
4to. Firenze (e Napoli), 1867–82 ——: Questione della Società. 8vo. Torino, 1861
Moesta (Carl Wilhelm):
: Informe sobre las observaciones hechas durante el eclipse solar de 30 de Noviembre de 1883.
8vo. Santiago de Chile, 1854
— : Determinacion de la latitud jeografica del circulo meridiano del observatorio nacional de Santiago.
8vo. Santiago de Chile, 1854
: Observaciones astronómicas, see Santiago de Chile.

Mogge (Jacob): Algemeene manier tot de practijck oeffeningh der Sonnewysers. fol. Middelburgh, 1675 [1666] Mohammed ben Musa: The algebra of Mohammed ben Musa, edited and translated by Frederic Rosen. 8vo. London, 1831 Mohn (H.): ---: Am kometbanernes indbyrdes beliggenhed besvarelse af Universitetets prisopgave for 1860. 4to. Christiania, 1861 --: \*Den magnetiske declination i Christiania, udledet af Observationer 1842-62. Svo. Christiania, 1863 ---: \*Iagttagelser over Kometen 1862 II anstillede paa Christiania Observatorium. Svo. Christiania, 1863 -: \*Bewölkung in Christiania. Svo. Berlin [1864] ---: \*Nogle bemærkninger om tordenveirenes Dannelse. Svo. Christiania, 1868 ---: \*Stormen den 7de til 8de Febuar 1868. 4to. Kristiania, 1868 ---: \*Norges vind- og stormstatistik. 8vo. Christiania, 1869 ---: \*Om tordenvejr i Norge i 1868-69. Svo. Christiania, 1869-70 ---: Température de la mer entre l'Islande, l'Écosse et la Svo. Christiania, 1870 Norvège. —: \*Luftens temperatur i og udenfor Christiania samt dens förandring med højden sammesteds. Svo. Christiania, 1874 ---: \*Bidrag til Øst-Ishavets klimatologi og meteorologi. 8vo. Christiania, 1874 ---: See also Norwegian North Atlantic Expedition. Mohn (H.) og C. de Seue: \*Meteorologiske meddelser. 8vo. Christiania, 1868 Mole (John): Elements of algebra; to which is prefixed a choice collection of arithmetical questions, with their solutions. 8vo. London, 1788 Molerius (Elias): De Sydere novo, seu de nova stella que ab 8 die Octobris anni . . . . 1604 inter astra Sagittarii videri cœpit . . . . Enarratio apodeictica. 4to. 1666 Molison (A. R.): Against the theory of the retarding influence of tidal action on the axial motion of the earth, and showing the true 8vo. London, n.d. source of tidal energy. Moll (Gerard):

. Oratio de vitanda, in astronomiae studio, fingendi temeritate,

et coeli observatione quam diligentissime instituenda.
[Inaugural Dissertation.] 8vo. Trajecti ad Rhenum, 1819

: \*Mercurius in Sole visus, of overgang van Mercurius over die Zon; den 5 Mei 1832 te Utrecht waargenomen

4to. [Amsterdam, 1833]

[Moll, H.]:
On the alleged decline of science in England. By a foreigner.
Möller (Axel):
: *Undersökning af planeten Pandoras rörelse. Afdelningen
I, II. 4to. Stockholm, 1870-77
: *Elementer för Fayes Komet och efemerid för dess
återkomst 1873. 8vo. Stockholm, 1872 —: *Bericht über die Resultate einer neuen Berechnung der
Elemente des Faye'schen Comet. 8vo. Leipzig, 1872
- : *Redogörelse för de arbeten, som blifvit utförda på Astro-
nomiska Observatoriet i Lund under åren 1867–1874.
[Inaugural Dissertation.] 4to. Lund, 1875 ——: *Elementer och efemerid för Fayeska kometens återkomst
1880. Stockholm, 1878
: *Nya elementer för planeten Pandora, härledda ur obser-
vationerna under 16 oppositioner 1858-77.
8vo. Stockholm, 1879  See also Lund, Observatorium.
Möller (J. C.):
Beschreibung des Saturnrings und anschauliche Darstellung
der Ursachen seiner veränderlichen Lichtgestalt.
Möller (Julius):
Die jährliche Periode des atmosphärischen Niederschlages in
der Schweiz. Inaugural-Dissertation. 4to. Zürich, 1883
Möller (Nicolaus):
De indubio solis motu, immotaque telluris quiete dissertatio.
Molyneux (William):
- : Sciothericum telescopium, or a new contrivance of adapting
a telescope to an horizontal dial for observing the moment
of time by day or night with proper tables requisite
thereto. 4to. Dublin, 1686 ——: Dioptrica nova, a treatise of dioptricks, in two parts, wherein
the various effects and appearances of spherick glasses
together with their usefulness are explained.
4to. London, 1692
Monatliche Correspondenz zur Beförderung der Erd- und Himmels-Kunde:
: Herausgegeben von Fr. von Zach.
28 vols. Gotha, 1800–1813
: Register Angefertigt von J. G. Galle.
8vo. Gotha, 1850 ——: See Correspondance Astronomique.
1
Moncalieri, R. Collegio Carlo Alberto:  —: Bullettino Meteorologico dell' Osservatorio compilato
dal P. Francesco Denza, 1865–80. Vol. 1–15.
4to. Torino, 1866–81
: Associazione Meteorologica Italiana: Bullettino Mensuale

Moncalieri, R. Collegio Carlo Alberto—continued. pubblicato per cura dell' Osservatorio Centrale del Real Collegio. Serie 2, 1880-83. Vol. 1-4. 4to. Torino, 1881-84 —: See also Denza (F.) Monckhoven (D. van): ---: \*De l'élargissement des raies spectrales de l'hydrogène. 4to. Paris, 1882 —: A popular treatise on photography; also a description of, and remarks on, the stereoscope and photographic optics, &c., &c. Translated by W. H. Thornthwaite. Second edition. 12mo. London, n.d. Moniteur Scientifique, Journal des Sciences pures et appliquées. Tome 6-9. 4to. Paris, 1864-67 Montano (Don Vincente): Discurso filosofi-astronomico . . . . sobre el Cometa que apareció . . . . 1689. 4to. Barcelona, 1690 Monteiro da Rocha (J.): Mémoires sur l'Astronomie pratique . . . . traduits du portugais. 4to. Paris, 1808 Montémont (Albert): Lettres sur l'Astronomie, en prose et en vers. 4 vols. Svo. Paris, 1823 Monteregio, see Regiomontanus. Montignot (l'Abbé): État des Étoiles fixes au second siècle, par Claude Ptolémée, comparé à la position des mêmes étoiles en 1786, avec le texte grec & la traduction françoise. 4to. Strasbourg, 1787 Montigny (Ch.): —: [13 papers on the scintillation of stars, from Brussels Academy Bulletins. 8vo. Bruxelles, v.d. -: \*Les grandes découvertes faites en physique depuis la fin du XVIIIe siècle. 8vo. Bruxelles, 1882 Montlivault (E. de): Lettre adressée à Sir John Herschell [sic] sur les causes de l'aberration de la lumière. 4to. Tours, 1835 Montpellier, Académie des Sciences et Lettres: Mémoires de la Section des Sciences. Tome 1-10.

oces. Tome 1–10.
4to. Montpellier, 1847–82

Montreal, Royal Society of Canada:

Proceedings and Transactions, 1882-83. Vol. 1.

4to. Montreal, 1883

Montsouris, Observatoire Astronomique:

— : Annales du Bureau des Longitudes (&c.). Tome 1-2.

4to. Paris, 1877–82

---: See also Paris, Bureau des Longitudes.

Montucla (Jean Étienne):

Histoire des Mathématiques . . . . Nouvelle [seconde] édition, considérablement augmentée, et prolongée jusque vers l'époque actuelle. 4 vols. 4to. Paris, 1799-1802

The third and fourth volumes completed and edited by La Lande; for

list of contents see De Morgan.

#### Moon:

Conjectures sur la réunion de la lune à la terre, et des satellites en général à leur planète principale . . . . Par un ancien officier de Marine. 8vo. Paris, 1821

Moon (rotation of the). An examination of the astronomical doctrine of the moon's rotation. Svo. Edinburgh, 1847

#### Moon (Robert):

----: Professor Challis and Professor Tardy. The new equation in hydrodynamics. 8vo. Cambridge, 1850

---: An appeal to the Cambridge Philosophical Society in connection with a recent decision of the Council of the Society.

8vo. London, 1872

### Moore (E. K.):

\*Method of testing chronometers at the U.S. Naval Observatory.

8vo. Annapolis, 1884

#### Moore (John Hamilton):

The new practical navigator; being an epitome of Navigation, containing the different methods of working the lunar observations, and all the requisite tables used with the Nautical Almanac . . . . Twelfth edition.

8vo. London, 1796

#### Moore (Jonas):

— : A new systeme of the Mathematicks; containing arithmetick, and the principles of algebra; practical geometry; trigonometry; cosmography; navigation; the doctrine of the sphere; astronomical tables; a new geography.

2 vols. 4to. London, 1681 (1680-81) pendium, or useful practises in arith-

——: A mathematical compendium, or useful practises in arithmetick, geometry, and astronomy, geography and navigation. . . . 12mo. London, 1695

#### Moore (J. J.):

The British mariner's vocabulary, or universal dictionary of technical terms and sea phrases. 12mo. London, 1801

#### Morin (Arthur Jules):

Aide-mémoire de mécanique pratique à l'usage des officiers d'artillerie et des ingénieurs civils et militaires.

12mo. Bruxelles, 1838

#### Moritz (A.):

---: \*Die Sonnenfinsterniss vom 6. März (22 Februar) 1867, beobachtet in Tiflis. 8vo. St. Petersburg, 1868

— : Exercices Hypsométriques. Livr. 1. Svo. Tiflis, 1869 — : Das Reflexions-Thermometer. Svo. Tiflis, 1876

- : \*Bemerkungen über die Meereshöhe von Tiflis.

8vo. St. Petersburg.

- : See Tiflis, Physikalisches Observatorium.

#### Moritz (A.) und H. Kiefer:

Sammlung von Hülfstafeln zur Berechnung barometrischer Höhenbestimmungen. [German and Russian.] 4to. Tiflis, 1870

233
Morley (William H.):
: Description of a planispheric astrolabe constructed for Shah Sultan Husain Safawi comprising an account of the
astrolabe generally, with notes to which are added concise notices of twelve other astrolabes. fol. London, 1856 : *Description of an Arabic quadrant. Svo. London, 1860
Morrison (Joseph):
An elementary treatise on plane trigonometry, with numerous examples and applications. Svo. Toronto, 1880
Morrison (R. J.):
The Comet: a large lithographic map of the true course of Encke's Comet, with a letter to the members of the Royal Astronomical Society.  Svo. London, n.d.
[Morton (Pierce)]:
: Geometry, plane, solid, and spherical, in six books: to which is added in an appendix the theory of projection, so far as it is auxiliary to geometry; with an account of the plane sections of the cone and cylinder. (Library of Useful Knowledge.)  Syn. London, 1839
—: Ditto. Another edition. Svo. London, 1838
Moscow, Observatoire:  —: Annales (publiées par Th. Bredichin). Vol. 1-9.
4to. Moscou, 1874–83
— : Über den im August 1847 in Moskau entdeckten Kometen. 8vo. Moscou
Moseley (Henry):  Lectures on astronomy delivered at King's College, London.
Fourth edition. 8vo. London, 1854
Mossotti (Ottaviano Fabrizio):  —: Sur les forces qui régissent la constitution intérieure des
corps. 4to. Turin, 1836 —: Sulla costituzione del sistema stellare di cui fa parte il sole.
8vo. Corfu, 1840  : *Sulle proprietà degli spettri di Fraunhofer formati dai re- ticoli, ed analisi della luce che somministrano.
8vo. Pisa, 1845
: Lezioni elementari di Fisica Matematica.
2 vols. 8vo. Firenze, 1845 ——: *Discussione analitica sull' influenza che l' azione di un
mezzo dielettrico ha sulla distribuzione dell'elettricità alla
superficie di più corpi elettrici disseminati in esso.
-: *Sulle macchie del disco solare. 4to. Modena, 1846 8vo. [Pisa], 1854

Mouchez (E.), see Paris, Observatoire.

# Mount Hamilton, Lick Observatory:

Report to the Trustees of the 'James Lick Trust' of observations made on Mt. Hamilton with reference to the location of Lick Observatory, by S. W. Burnham. 4to. Chicago, 1880

#### Mouton (Gabriel):

Observationes diametrorum Solis et Lunæ apparentium, meridianarúmque aliquot altitudinum Solis & paucarum fixarum, cum tabulâ declinationum Solis... Adjecta est brevis dissertatio de dierum naturalium inæqualitate [&c.].

4to. Lugduni, 1670

## Mudge (Thomas), Jun.:

A reply to the answer of the Rev. Dr. Maskelyne, Astronomer Royal, to a narrative of facts relating to some time-keepers constructed by Mr. Thomas Mudge. . . . With remarks . . . . by the Count de Bruhl. 8vo. London, 1792

A description, with plates, of the time-keeper invented by the late . . . . T . . . . M. To which is prefixed a narrative by Thomas Mudge, his son, of measures taken to give effect to the invention since the reward bestowed upon it by the House of Commons.

4to. London, 1799

## Mudie (Robert):

The Heavens.

8vo. Philadelphia, 1836

## Mueller (Johann):

Die Aequatorialzone des gestirnten Himmels.

1 sheet [with explanation], Freiburg, 1856

## Mulcaster (J. W.):

An elementary treatise on Statics, with numerous examples and solutions.

8vo. London, 1871

## Mulerius (Nicolaus):

-----: Tabulæ Frisicæ lunæ-solares quadruplices e fontibus Cl. Ptolemæi, Regis Alfonsi, Nic. Copernici & Tychonis Brahe recens constructæ; quibus accessere Solis tabulæ totidem.

4to. Alemariæ, 1611

----: Judæorum annus lunæ-solaris, et Turc-Arabum annus merè lunaris. fol. Groningæ, 1630

## Müller (Friederich Christoph):

Tafeln der Sonnenhöhen für ganz Deutschland und dessen westlich und östlich benachbarte Länder. 8vo. Leipzig, 1791

#### Müller (H.):

Die Kepler'schen Gesetze: eine neue elementare Ableitung derselben aus dem Newton'schen Anziehungsgesetze.

8vo. Braunschweig, 1870

Müller (Hugo W.): see De La Rue and Müller.

# Muller (John):

A mathematical treatise; containing a system of Conic Sections, with the doctrine of Fluxions and Fluents, applied to various subjects.

4to. London, 1736

#### Müller (W.):

——: On the use of a knowledge of astronomy and geography.

8vo. (London, 1829)

---: Geography and astronomy; illustrated by patent cosmospheres, or globes of the universe. 8vo. (London, 1829)

Munich, Königlich - Bayerische Akademie der Wisson- schaften:
: Abhandlungen der mathematisch-physikalischen Classe.  Band 1-14. 4to. München, 1832-83 : Bulletin, 1842-53. 12 vols. 4to. München, 1842-53 : Sitzungsberichte, Jahrgang 1860-70.  8vo. München, 1860-70
—: Inhaltsverzeichniss zu Jahrgang 1860-70. Svo. München, 1872
: Sitzungsberichte der mathematisch-physikalischen Classe, 1871–83. Bund 1–13. 8vo. München, 1871–83. Almanach, 1844, '45, '49, '55, '59, '75, '78. 12mo. München.
Munich, Sternwarte:
: Astronomische Beobachtungen angestellt auf der K. Sternwarte zu Bogenhausen von J. Soldner, 1820–27. Theil 1–5. Theil 2–5 herausgegeben von J. Lamont.
: Observationes Astronomicae in Specula Regia Monachiensi institutae et editae a J. Lamont, 1828-44. Vol. 6-15 (seu novae seriei vol. 1-10). 4to. Monachii, 1841-47
: Annalen herausgegeben von J. Lamont. Band 1–20 (der vollständigen Sammlung Band 16–35).  8vo. München, 1848–74
——: Supplementband 1–13. 8vo. München, 1851–74
Band 1-4. Meteorologische Beobachtungen.  5. Verzeichniss von 9412 Aequatorial-Sternen zwischen + 3° und - 3° Declination.  6, 7. Meteorologische Beobachtungen.  8. Verzeichniss von 6323 telescopischen Sternen zwischen + 3° und + 9° Declination.  9. Verzeichniss von 4793 telescopischen Sternen zwischen - 3° und - 9° Declination.  11. Verzeichniss von 3571 telescopischen Sternen zwischen + 9° und + 15° Declination.  12. Verzeichniss von 4093 telescopischen Sternen zwischen - 9° und - 15° Declination.  13. Verzeichniss von 5563 telescopischen Sternen nördlich von + 15° und südlich von - 15° Declination.
: Nachweise über die an der Münchener Sternwarte von 1840 bis 1869 beobachteten Zonen. 8vo. : Jahrbuch, 1838, 1840-41, von J. Lamont. Jahrg. 1, 3, 4. 12mo. München, 1837-40.
: Jahres-Bericht, 1852, 1854, 1858. 8vo. München. : *Resultate des magnetischen Observatoriums in München während der dreijährigen Periode 1843-45, von J. Lamont. 4to. München, 1846
: *Resultate aus den meteorologischen Untersuchungen, nebst Andeutungen über den Einfluss des Clima von Mün- chen auf die Gesundheits-Verhältnisse der Bewohner, von J. Lamont. 4to. München, 1857

Munich, Sternwarte-continued.
: Meteorologische und magnetische Beobachtungen
Jahrgang 1882. 8vo. München, 1883 —: See Lamont, J.
Murdoch (Patrick):
Mercator's sailing, applied to the true figure of the earth
with an introduction, concerning the discovery and deter-
mination of that figure. 4to. London, 1741
Murray (W. Keith):
Description of an astronomical observatory at Ochter
tyre, Perthshire.
Musschenbroek (Peter van):
: Physicæ experimentales et geometricæ de magnete, tuborum capillarium, vitreorumque speculorum attractione, magni-
tudine terræ, cohærentia corporum firmorum dissertationes
ut et ephemerides meteorologicæ ultrajectinæ.
4to. Lugduni Batavorum, 1720
—: The elements of natural philosophy translated by John Colson. 2 vols. 8vo. London, 1742
-: Cours de physique expérimentale et mathématique
Traduit par Sigaud de la Fond. 3 vols. 4to. Paris, 1769
Mylius (Albert de):
Description of a planetarium, or astronomical machine
invented, and partly executed, by Phil. Matthew Hahn 8vo. London, 1791
Nagelius (Paulus):
Stellæ prodigiosæ seu cometæ Das ist, des newer
Cometen und Wunder-Sterns in 1618 erschiener
warhafftige Deutung 4to. 1619
Nagy (Károly):
: Mémoire sur le système solaire, et sur l'explication des phénomènes célestes. 8vo. Paris, 1862
: Considérations sur les comètes ou éléments d'une cométo-
logie. 8vo. Paris, 1862
— : Die Sonne und die Astronomie. 8vo. Leipzig, 1866
Namur (A.):
Tables de logarithmes à 12 décimales, jusqu'à 434 milliards avec preuves précédées d'une introduction théorique
et d'une notice sur l'usage des tables par P. Mansion.
8vo. Bruxelles, 1877
Napier [Neperus], (John), Baron of Merchistoun:
: Mirifici Logarithmorvm canonis constructio, et eorum ad
natvrales ipsorum numeros habitudines Quibus accessere Propositiones ad triangula sphærica faciliore cal
culo resoluenda. Vnà cum annotationibus Henric
Briggii. 4to, Lugduni, 1620
: De arte logistica libri qui supersunt. [Edited by
Mark Napier.] 4to. Edinburgi, 1839

Naples, Reale Osservatorio Specola Reale):

--: Ragguaglio.

: Comentarj Astronomici di Carlo Brioschi. Vol. 1
(in 2 parts). 4to. Napoli, 1824–26
—: Annuario, 1846, 1860.
Naples, Società Reale (Accademia delle Scienze):
: Atti della Reale Accademia delle Scienze, sezione della Società Reale Borbonica. Vol. 2, 5, 6.
4to. Napoli, 1825–51
— : Memorie della Reale Accademia delle Scienze, dal 1852 in
avanti ripartite nelle tre classi di matematiche, scienzo
naturali, e scienze morali, 1852-57.
2 vols. 4to. Napoli, 1856-57
: Atti dell' Accademia delle scienze fisiche e matematiche. Vol. 1, 3-9. 4to. Napoli, 1863-82
: Rendiconto delle adunanze e de' lavori dell' Accademia.
m a second
Tomo 5–9, no. 49–51. 4to. Napoli, 1846–50 : Nuova serie. Anno 1–6. 4to. Napoli, 1852–57
: Rendiconto dell' Accademia delle Scienze fisiche e mate-
matiche. Anno 1–21. 4to. Napoli, 1862–82
Napoléon (Prince):
*Expériences sur la direction des courants de l'océan Atlan-
tique septentrional. 4to. Paris, 1856
Nares (G. S.):
Arctic expedition: Report of Proceedings. fol. London, 1876
Narrien (John):
- : An historical account of the origin and progress of Astro-

Royal Military College.

Nasmyth (James) and James Carpenter:

The Moon: considered as a planet, a world, and a satellite
... Second edition. 4to. London, 1874

-: Practical astronomy and geodesy; including the projections of the sphere and spherical trigonometry, for the use of the

With plates, illustrating chiefly the ancient

Natal Observatory, see Durban.

Natani (Leopold):

nomy.

Der Himmel und die Weltkörper. Eine Uebersicht der Astronomie und der Hülfswissenschaften derselben.

8vo. Berlin, 1863

8vo. London, 1833

8vo. London, 1845

4to. Napoli, 1821

Nature. A weekly illustrated Journal of Science. Vol. 1-29.
4to. London, 1870-84

Naturforscher (der): Wochenblatt zur Verbreitung der Fortschritte in den Naturwissenschaften. Herausgegeben von W. Sklarek. Jahrgang 7-17. 4to. Berlin, 1874-84

Nautical Almanac (the). See London.

Neison (Edmund):

The Moon and the condition and configurations of its surface.

8vo. London, 1876

#### Nell (A. M.): Der Planetenlauf; eine graphische Darstellung der Bahnen der Planeten, um mit Leichtigkeit ihren jedesmaligen Ort unter den Gestirnen auf eine Reihe von Jahren voraus zu bestimmen. 8vo. [with atlas of 5 plates, fol.] Braunschweig, 1858 Neptune, Discovery of: \*Investigation of the rival claims of Adams and Le Verrier to the discovery of the new planet Astrea. Svo. London, 1846 Nesbit (A.): ---: A complete treatise on practical land-surveying. 8vo. York, 1810 — : A treatise on practical mensuration. 8vo. London, 1816 Neuchatel, Société des Sciences Naturelles: Bulletin. 1870-83. Tome 9-13. 8vo. Neuchatel, 1873-83 Neumayer (Georg): - : Results of the magnetic Survey of the Colony of Victoria, executed during the years 1858-64. 4to. Mannheim, 1869 — : Anleitung zu wissenschaftlichen Beobachtungen auf Reisen, mit besonderer Rücksicht auf die Bedürfnisse der kaiserlichen Marine. Svo. Berlin, 1875 ---: See also Melbourne Observatory. Newcastle-upon-Tyne, Literary and Philosophical Society: Catalogue of the library. 8vo. Newcastle, 1848 Newcomb (Simon): - : \*On the secular variations and mutual relations of the 4to. Cambridge [U.S.], 1860 orbits of the asteroids. 4to. Washington, 1866 tables of its motion. -: \*Investigation of the distance of the Sun, and of the elements which depend upon it, from the observations of Mars made during the opposition of 1862, and from other sources. 4to. Washington, 1867 -: \*Description of the transit circle of the United States Naval Observatory, with an investigation of its constants. 4to. Washington, 1867 ---: \*Théorie des perturbations de la lune qui sont dues à l'action des planètes. 4to. Paris [1871] -: \*On the Right Ascensions of the Equatorial fundamental Stars, and the corrections necessary to reduce the Right Ascensions of different Catalogues to a mean homogeneous 4to. Washington, 1872 -: \*On the possible variability of the earth's axial rotation, as investigated by Mr. Glasenapp. 8vo. New Haven, 1874

——: Investigation of corrections to Hansen's tables of the Moon, with tables for their application. [American Transit of

: \*On the mean motion of the Moon. 8vo. New Haven, 1877
: \*Researches on the motion of the Moon, made at the United
States Naval Observatory, Washington. Part 1. Reduc-

4to. Washington, 1876

Venus papers, part 3.]

Newcomb (Simon)—continued.
tion and discussion of observations of the Moon before
1750. 4to. Washington, 1878
—: Ditto. Second edition. Svo. London, 1883
: Populäre Astronomie; deutsche vermehrte Ausgabe, bear-
beitet durch R. Engelmann. 8vo. Leipzig, 1881
— : On the recurrence of solar eclipses, with tables of eclipses
from B.C. 700 to A.D. 2300. 4to. Washington, 1879
— : Observations of the transit of Venus, December 8-9, 1874, made and reduced under the direction of the Commission
created by Congress. Part. 1. General discussion of re-
sults. 4to. Washington, 1880
- : Discussion and results of observations on transits of Mer-
cury, 1677–1881. 4to. Washington, 1882
— : Catalogue of 1098 standard clock and zodiacal stars.
4to. Washington [1882]
— : Report to the Secretary of the Navy on recent improvements in astronomical instruments. 8vo. Washington, 1884
: Development of the perturbative function and its deriva-
tives. 4to. Washington, 1884
: See also Washington, U. S. Naval Observatory.
Newcomb (Simon) and Edward S. Holden:
: Astronomy for students and general readers. (American
Science Series.) Second edition. Svo. New York, 1880
— : Astronomy. (American Science Series, Briefer Course.) Second edition.  8vo. New York, 1881
Newcomb (Simon) and John Meier:  —: A transformation of Hansen's lunar theory compared with
the theory of Delaunay. 4to. Washington, 1880
: Formulæ and tables for expressing corrections to the geo-
centric place of a planet. 4to. Washington, 1883
New Haven, Connecticut Academy of Arts and Sciences:
Transactions. Vol. 1-5. 8vo. New Haven, 1866-82
New Haven, Yale College Observatory:
Report for the years 1880-83. Svo. New Aaven, 1881-83
New South Wales, Royal Society:
Wales, 1862-65. 8vo. Sydney, 1866
-: Transactions of the Royal Society of New South Wales,
1867-74. Vol. 1-8. 8vo. Sydney, 1868-75
: Transactions and Proceedings of the Royal Society of New
South Wales, 1875. Vol. 9. 8vo. Sydney, 1876
: Journal and Proceedings of the Royal Society of New South Wales, 1876-82. Vol. 10-16. Svo. Sydney, 1877-83
The title of the Society was changed to 'Royal Society' in 1867.
Newton (Hubert Anson):
-: *An account of two meteoric fireballs, observed in the
United States August 2 and 6, 1860.
8vo. New Haven, 1862
: *On November Star-showers. 8vo. New Haven, 1864

Newton (Hubert Anson)continued.
: *Abstract of a memoir on Shooting Stars.
8vo. New Haven, 1865
: *On certain recent contributions to Astro-Meteorology.
8vo. New Haven, 1867
: *On the origin of Comets. 8vo. New Haven, 1878
Newton (Hubert Anson) and A. W. Phillips:
*On the Transcendental Curves $\sin y \sin my = a \sin x \sin x$
nx+b. Svo. New Haven
Newton (Isaae):
: Philosophiæ naturalis principia mathematica.
4to. Londini, 1687
— : Ditto. Editio ultima, auctior et emendatior [a R. Cotes].
4to. Amstælodami, 1714
-: Ditto Perpetuis commentariis illustrata, communi
studio T. Le Seur & F. Jacquier. 3 vols. 4to. Genevæ, 1739–42
—: Ditto Editio altera. 3 vols. 4to. Coloniæ Allobrogum, 1760
-: Ditto Editio nova. 4 vols. 8vo. Glasguæ, 1822
-: The Mathematical principles of natural philosophy
Translated into English by Andrew Motte; to which are
added The laws of the Moon's motion according to gravity,
by John Machin. 2 vols. Svo. London, 1729
: The mathematical principles of natural philosophy
translated into English by Andrew Motte; to which are
added Newton's System of the World, a short comment on,
and defence of, the Principia, by W. Emerson, with the
laws of the Moon's motion by J. Machin. New
Edition by W. Davis. 3 vols. 8vo. London, 1803
: Ditto. 3 vols. 8vo. London, 1819
[]: Principes mathématiques de la philosophie naturelle, par
feue Madame la Marquise Du Chastellet.
2 vols. 4to. Paris, 1759 A translation of the Principia, with Commentary.
: De mundi systemate. [Principia, lib. III.] 4to. Londini, 1731
-: The first three sections of Newton's Principia, with copions
notes and illustrations, and a great variety of deductions
and problems. By Rev. John Carr. 8vo. London, 1821
: Analysis per quantitatum series, fluxiones, ac differentias,
cum enumeratione linearum tertii ordinis. [Ed. W. Jones.]
4to. Londini, 1711
: Optice; sive de reflexionibus, refractionibus, inflexionibus
& coloribus lucis, libri tres. Latine reddidit Samuel
Clarke. Editio secunda. 8vo. Londini, 1719
—: Universal Arithmetick, or a treatise of arithmetical com-
position and resolution; to which is added Dr. Halley's
method of finding the roots of equations arithmetically.
Translated by J. Raphson and revised and corrected by
S. Cunn. Second edition. 8vo. London, 1728  ——: Optical lectures read in the publick schools of the University
of Cambridge, 1669 Translated into English
out of the original Latin. 8vo. London, 1728
5 01 01 01 01 1 / 20

Newton (Isaac) = continued.

—: Lectiones opticæ, annis 1669, 1670 & 1671 in scholis publicis habitæ, et nunc primum ex MSS. in lucem editæ.
4to. Londini, 1729 —: Opticks; or a treatise of the reflections, refractions, inflec-
tions and colours of light. Fourth edition.
8vo. London, 1730 —: A treatise of the method of fluxions and infinite series,
with its application to the geometry of curve lines.
8vo. London, 1737
— : Opuscula mathematica, philosophica, et philologica. Collegit
partimque Latinè vertit ac recensuit Joh. Castillioneus.
3 vols. 4to. Lausannæ & Genevæ, 1744
—: Two treatises of the quadrature of curves and analysis by
equations of an infinite number of terms, explained
translated into English, with a large commentary [&c.]
by John Stewart. 4to. London, 1745
— : Universal Arithmetick, or a treatise of arithmetical compo-
sition and resolution Translated by J. Raphson, and
revised and corrected by S. Cunn. To which is added a
treatise upon the measures of ratios by J. Maguire
with a series of notes by Rev. T. Wilder. 8vo. London, 1769
—: Enumeratio Linearum tertii ordinis; sequitur illustratio
ejusdem tractatus, auctore Jacobo Stirling. 8vo. Paris, 1797
— : Apologie du sentiment de Monsieur le Chevalier Newton
sur l'ancienne chronologie des Grecs, contenant des réponses
à toutes les objections qui y ont été faites jusqu'à présent.
Par Monsieur le chevalier S——t.
4to. Francfort sur le Mein, 1757
: Opera quæ exstant omnia, comentariis illustrabat Samuel
Horsley. 5 vols. 4to. Londini, 1779–85
—: Discoveries, see Maclaurin.
: Philosophy, see Algarotti, Domckius, Pemberton, Voltaire,
Whiston.
—: Principia, see Emerson, Rigaud, Wright.
-: Réfutation de Neuton, see Banières.
-: Resistance of solids, see Robinson (C.)
— : Newton and Flamsteed, see Whewell. — : De Analysi promota, &c. See Commercium Epistoliëum.
: Life, see Brewster, Grant, Turnor, Soc. Diff. Useful Know-
ledge.
leage.
Newton (Isaac) and Roger Cotes:
Correspondence including letters of other eminent men,
now first published from the originals in the library of
Trinity College, Cambridge by J. Edleston, M.A.
8vo. London & Cambridge, 1850
Newton (T.):

New York, Astor Library:

Annual Report, 1880-84.

A short treatise on the conic sections. Svo. Cambridge, 1794

8vo. New York

#### New York Chamber of Commerce: On the expediency and practicability of a time and weather Observatory in the City of New York. 8vo. New York, 1857 New York, Columbia College: The School of Mines Quarterly. Vol. 5, No. 3, 4; Vol. 6, No. 1. Svo. New York, 1881 New York, Meteorological Observatory: Annual Report for 1876-78, by Daniel Draper, Director. 8vo. New York, 1877-79 Nichol (John Pringle): ——: The phenomena and order of the solar system. Svo. Edinburgh, 1838 ----: Views of the architecture of the heavens . . . . Fourth edition. 8vo. Edinburgh, 1843 ---: The Stellar Universe; views of its arrangements, motions, and evolutions. 8vo. Edinburgh, 1848 —: Thoughts on some important points relating to the system of the world. 8vo. Edinburgh, 1848 —: The architecture of the heavens . . . Ninth edition, entirely revised and greatly enlarged. Svo. London, 1851 Nicholson (Peter): ---: An introduction to the method of increments, expressed by a new form of notation, shewing more intimately its relation to the fluxional analysis. 8vo. London, 1817 ---: Essays on the combinatorial analysis, shewing its application to some of the most useful and interesting problems of algebra. 8vo. London, 1818 ---: The rudiments of algebra. 12mo. London, 1819 ---: Essay on involution and evolution; . . . with an Appendix, showing the use of figurate numbers and arithmetical equivalents in the extraction of roots. 8vo. London, 1820 —: Analytical and arithmetical essays, consisting of continued fractions—figurate numbers . . . . the transformation of equations . . . finite differences, indeterminate equations, and the combinatorial analysis. 8vo. London, 1821 Nicholson (Peter) and J. Rowbotham: - : A practical system of Algebra, designed for the use of schools and private students. 12mo. London, 1824 —: Ditto. Key. 12mo. London, 1825 ---: Ditto. Second edition. 12mo. London, 1831 Nicholson's Journal, see Journal of Natural Philosophy. Nicolaus Rensbergensis: Astronomia Teutsch. 4to. Augspurg, 1568 Nicollet (J. N.): - : \*Mémoire sur la libration de la lune. 8vo. Paris [1818] ---: \*Addition au mémoire sur la libration de la lune. Svo. Paris. Nicomachus of Gerasa:

Νικομάχου Γερασινοῦ 'Αριθμητικῆs βιβλία ἐύο. Nicomachi Gerasini arithmeticæ libri duo: nunc primùm typis excusi, in

4to. Parisiis, 1538

lucem eduntur.

Niesten (L.):
: *Observations sur l'aspect physique de la planète Mars
pendant l'opposition de 1877. 4to. Bruxelles, 1878
: *Recherches sur les couleurs des étoiles doubles.  Svo. Bruxelles, 1879
Nieuwentyt (Bernard):
The religious Philosopher, or the right use of contemplating
the works of the Creator, designed for the conviction of
atheists and infidels translated by J. Cham-
berlayne. To which is prefixed a letter to the translator by J. T. Desaguliers. Fifth edition. Vol. 1.
8vo. London, 1745
Nitikin (Basil) and Prochor Souvoroff:
Elements of plane and spherical trigonometry.
4to. London [1786]
Nobile (Antonio): : *Modo di determinare le differenze di Longitudini geografiche
per via delle stelle cadenti. 4to. 1840
: *Memoria sulle stelle cadenti, 4to. Napoli, 1841
: *Memoria su le maree del Golfo di Napoli. 4to. Napoli, 1842
: *Elogio storico di Macedonio Melloni. 4to. Napoli, 1855
Nobile (Arminio):
: *Saggio di un nuovo metodo per l' osservazione delle dis-
tanze scambievoli delle stelle multiple. 4to. Napoli, 1875 —: *Misure di angoli di posizione di alcuni sistemi di stelle
multiple. 4to. Napoli, 1875
: *Sulle due stelle multiple 1263 $\Sigma$ e $\sigma$ Coronæ.
4to. Napoli, 1876
—: Terza determinazione della latitudine geografica del R.
Osservatorio di Capodimonte. 4to. Napoli, 1883
Noble (S.):
The astronomical doctrine of a plurality of worlds irreconcilable with the popular systems of theology, but in perfect
harmony with the true Christian religion.
Svo. London, 1828
Noël (François):
Observationes mathematica et physica in India et China
factæ ab anno 1684 usque ad annum 1708. 4to. Pragæ, 1710
Nollet (Jean Antoine):
-: Lectures in experimental philosophy. Translated
by John Colson. 8vo. London, 1752
—: Leçons de physique expérimentale. 5 <sup>me</sup> édition.
Nonius (Petrus):
Nonius (Petrus):  Opera; que complectuntur primum dvos libros, in qvorum
priore tractantur pulcherrima Problemata; in altero
regulæ & instrumenta artis navigandi Annotationes
in Aristotelis problema mechanicum de motu( navigii :
Item in G. Purbachii planetarum theoricas annota-
tiones: De Erratis Orontii Finæi: De cre- pusculis. fol. Basileæ, 1592
Principles, 191

#### Norman (Robert):

The newe attractive, shewing the nature, propertie, and manifold vertues of the loadstone.

8vo. London, 1720

#### Normand (J. A.):

---: Note sur la détermination de la parallaxe solaire.

8vo. Paris, 1874

---: Mémoire sur les occultations d'étoiles par les planètes.

4to. Paris, 1876

——: Navigation stellaire.

4to. Paris, 1883

#### Norton (William A.):

An elementary treatise on astronomy: in four parts, containing a systematic and comprehensive exposition of the theory, and the more important practical problems, with solar, lunar, and other astronomical tables . . . . (second edition).

8vo. New York, 1845

# Norway, Norwegische Commission der Europäischen Gradmessung:

: Geodätische Arbeiten, Heft 1-3. 4to. Christiania, 1882
: Geodätische Arbeiten, Heft 4, 5 (Vandstandsobservationer, Heft 1, 2). 4to. Christiania, 1882-83

## Norwegian North Atlantic Expedition, 1876-78:

Part 1–10. 4to. Christiania, 1880–83

Part I. Chemi, H. Tornøe.

2, 3. Zoologi, R. Collett, D. C. Danielssen, og J. Koren.

4. Historisk Beretning, &c., C. Wille.

- Astronomiske Observationer, H. Mohn; Magnetiske Obs.,
   C. Wille; Geografi, &c., H. Mohn.
- 6-8. Zoologi, D. C. Danielssen, J. Koren, G. A. Hansen, H. Friele.
- 9. Chemi. L. Schmelck.
- io. Meteorologi. H. Mohn.

#### Norwood (Matthew):

The Seaman's Companion, being a plain guide to the understanding of arithmetick, geometry, trigonometry, navigation, and astronomy, applied chiefly to Navigation.

. . . Second edition.

4to. London, 1671

#### Norwood (Richard):

---: The Sea-man's practice, contaying a fundamentall probleme in navigation experimentally verified. 4to. London, 1644

— : Ditto. Eighth edition. 4to. London, 1668— : Trigonometrie, or the doctrine of triangles: . . . . where-

unto is annexed . . . . a treatise of the application thereof in the three principal kindes of sayling (and a triangular canon logarithmicall, or a table of artificiall sines, tangents, &c.) Second edition. 2 parts in 1 vol. 4to. London, 1651

#### Novara:

Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857-59 unter den Befehlen des Commodore B. von Wüllerstorf-Urbair. Nautisch-physicalischer Theil.

4to. Wien, 1862-1865

Nürnberger (Joseph Emil):
Populäres astronomisches Handwörterbuch, oder Versuch
einer alphabetisch geordneten Erklärung der vornehmsten
Begriffe und Kunstwörter der Astronomie.
2 vols. Svo. Kempten, 1848
Nursingrow (Ankitam Venkata):
-: Solar eclipses, and the great partial eclipse of the 17th
August 1868 visible at Vizagapatam. 8vo.
-: Results of meteorological observations (at Daba Gardens,
Vizagapatam), 1872, 75-77, 79-82. Svo. Calcutta, 1873-83
Nyrén (Magnus):
-: *Détermination du coefficient constant de la précession au
moyen d'étoiles de faible éclat. 4to. St. Pétersbourg, 1870
: *Bestimmung der Nutation der Erdachse.
4to. St. Pétersbourg, 1872
-: *Die Polhöhe von Pulkowa. 4to. St. Pétersbourg, 1873
-: *Das Aequinoctium für 1865.0, abgeleitet aus den am
Passageninstrumente und am Verticalkreise in den Jahren
1861–70 in Pulkowa angestellten Sonnenbeobachtungen.
4to. St. Pétersbourg, 1876
: See also Pulkowa, Nicolai Hauptsternwarte.
Nyrén (Magnus) und V. Fuss:
*Bestimmung der Längen-Differenz zwischen den Stern-
warten Stockholm und Helsingfors, ausgeführt im Sommer
1870. 4to. St. Pétersbourg, 1871
Nystrom (John W.):
Principles of Dynamics. Svo. Philadelphia, 1874
Observatories:
Description of the public and private observatories in London
and its vicinity. 12mo. London, 1851
· ·
Observatory (The), a monthly review of Astronomy. Edited
by W. H. M. Christie (and E. W. Maunder). Vol. 1-7.
8vo. London, 1878–84
Observing Astronomical Society:  8vo. London, 1878-84
Observing Astronomical Society: Report of observations made by the members, 1869-1870.
Observing Astronomical Society: Report of observations made by the members, 1869–1870. Svo. Bristol, 1871
Observing Astronomical Society: Report of observations made by the members, 1869-1870. Svo. Bristol, 1871 Ochl (Edmund):
Observing Astronomical Society: Report of observations made by the members, 1869–1870. Svo. Bristol, 1871
Observing Astronomical Society: Report of observations made by the members, 1869-1870. Svo. Bristol, 1871 Ochl (Edmund): Versuch einer Theorie über Kometen. Svo. Wien, 1868 Oeltzen (Wilhelm):
Observing Astronomical Society: Report of observations made by the members, 1869-1870. Svo. Bristol, 1871 Ochl (Edmund): Versuch einer Theorie über Kometen. Svo. Wien, 1868 Oeltzen (Wilhelm): -: Argelanders Zonen-Beobachtungen vom 45° bis 80° nörd-
Observing Astronomical Society: Report of observations made by the members, 1869-1870. Svo. Bristol, 1871 Ochl (Edmund): Versuch einer Theorie über Kometen. Svo. Wien, 1868 Oeltzen (Wilhelm):: Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'o nach
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theoric über Kometen.  Svo. Wien, 1868  Ochtzen (Wilhelm):
Observing Astronomical Society:  Report of observations made by the members, 1869-1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'0 nach gerader Außteigung geordnet.  Svo. Wien, 1851-52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Ochtzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'0 nach gerader Außteigung geordnet.  Svo. Wien, 1851–52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.  : Argelanders Zonen-Beobachtungen vom 15° bis 31° süde.
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'o nach gerader Aufsteigung geordnet.  Svo. Wien, 1851–52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.'  : Argelanders Zonen-Beobachtungen vom 15° bis 31° südlicher Declination in mittleren Positionen für 1853.  Svo. Wien, 1857–58
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'o nördgerader Aufsteigung geordnet.  Svo. Wien, 1851–52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.'  : Argelanders Zonen-Beobachtungen vom 15° bis 31° südlicher Declination in mittleren Positionen für 1853.  Svo. Wien, 1857–58  In Vienna 'Sitzungsberichte,' Bd. 26, 27, 29, 31.
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'o nach gerader Aufsteigung geordnet.  Svo. Wien, 1851–52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.'  : Argelanders Zonen-Beobachtungen vom 15° bis 31° südlicher Declination in mittleren Positionen für 1853.  Svo. Wien, 1857–58  In Vienna 'Sitzungsberichte,' Bd. 26, 27, 29, 31.  : *Vergleichungen zwischen den Zonenbeobachtungen vom Bessel und Argelander.  Svo. Wien, 1854
Observing Astronomical Society:  Report of observations made by the members, 1869–1870.  Svo. Bristol, 1871  Ochl (Edmund):  Versuch einer Theorie über Kometen.  Svo. Wien, 1868  Oeltzen (Wilhelm):  : Argelanders Zonen-Beobachtungen vom 45° bis 80° nördlicher Declination, in mittleren Positionen für 1842'0 nach gerader Aufsteigung geordnet.  Svo. Wien, 1851–52  Vol. 1 and 2 of series 3 of 'Annalen der K.K. Sternwarte in Wien.  : Argelanders Zonen-Beobachtungen vom 15° bis 31° südlicher Declination in mittleren Positionen für 1853.  Svo. Wien, 1857–58  In Vienna 'Sitzungsberichte,' Bd. 26, 27, 29, 31.  : *Vergleichungen zwischen den Zonenbeobachtungen von

Oertling (August):

— : \*Ueber die Prüfung plan-paralleler Gläser, und Beschreibung des dabei in Anwendung gebrachten Instrumentes.

4to. Berlin, 1843

---: \*Beschreibung eines neuen Spiegelkreises. 4to. Berlin, 1844

Ogilby (William):

New theory of the figure of the earth, considered as a solid of revolution, founded on the direct employment of the centrifugal force, instead of the common principles of attraction and variable density.

4to. London, 1872

O Gyalla, Astrophysicalisches Observatorium:

Beobachtungen . . . . herausgegeben von N. von Konkoly. Band 1–5. 4to. Halle, 1879–83

Olbers (Wilhelm):

—: \*Verzeichniss aller bisher berechneten Cometenbahnen.

4to. Altona, 1823

—: Abhandlung über die leichteste und bequemste Methode die Bahn eines Cometen zu berechnen . . . . von Neuem herausgegeben von J. F. Encke. Svo. Weimar, 1847

— : Nachtrag . . . . von J. G. Galle. 8vo. Leipzig, 1864

Olbers (Wilhelm) und Friedrich Wilhelm Bessel:
Briefwechsel... Herausgegeben von Adolph Erman.
2 vols. 8vo. Leipzig, 1852

Oliver (A.), Comets, see Winthrop and Oliver.

Olivet (l'Abbé d'):

Histoire de l'Académie Françoise depuis 1652 jusqu'à 1700. Tome 2. 4to. Paris, 1729

Olmsted (Denison):

The mechanism of the heavens.

8vo. London, 1859

Olsen (Ole Theodore):

The Fisherman's Nautical Almanac, 1882-84. 12mo. Grimsby Oltmanns (Jabbo):

\*Ueber die wahre Epoche der grossen von Herodot erwähnten Sonnenfinsterniss am Flusse Halys. 4to. [Berlin, 1813]

Olufsen (C. F. R.), Tables du soleil, see Hansen et Olufsen.

Ommaney (Erasmus):

\*Address delivered at the Plymouth meeting of the British. Association for the Advancement of Science, to the Geographical Section.

8vo. London, 1877

Opelt (O. Moritz):

Der Mond. Populäre Darstellung der Verhältnisse und Erscheinungen welche von diesem Körper bekannt sind . . . . Nebst einer Karte der sichtbaren Oberfläche des Mondes, in fortschreitender Phase dargestellt, und einer Namen- und Höhenkarte. 8vo. [with 2 maps], Leipzig, 1879

Oppolzer (Theodor von):

: \*Berichte (2, 4, 6) der zur Beobachtung der totalen Sonnenfinsterniss des Jahres 1868 nach Aden unternommenen österreichischen Expedition. 8vo. Wien, 1868-69

Oppolzer (Theodor von)-continued.

Opporation (Industry of the Industry of Industry)
-: *Beobachtung des Venusdurchgangs (1874, December 8)
in Jassy und Bestimmung der geographischen Breite des
Beobachtungsortes. Svo. Wien, 1875  : *Entwicklung der Differentialquotienten der wahren Ano
malie und des Radiusvector nach der Excentricität in
nahezu parabolischen Bahnen. 8vo. Berlin, 1878 —: *Neue Methode zur Bestimmung der Bahnelemente gleicher
W. l. deinlichteit für einen bleinen Dleneten aus den
Wahrscheinlichkeit für einen kleinen Planeten aus der
Beobachtung einer Erscheinung. Svo. Berlin, 1878
— : Lehrbuch zur Bahnbestimmung der Kometen und Planeten. 2 vols. 4to. Leipzig, 1870–80
Ditta David a prosite Anderson to Loingin 1882
— : Ditto. Band 1, zweite Auflage. 4to. Leipzig, 1882 — : *Syzygien-Tafeln für den Mond, nebst ausführlicher An-
weisung zum Gebrauche derselben. 4to. Leipzig, 1881
: 1st das Newton'sche Attractionsgesetz zur Erklärung der
D. W. www. gen den Himmeldkönnen augneichend ! Het pun
Bewegungen der Himmelskörper ausreichend? Hat man
Veranlassung, dasselbe nur als Näherungsausdruck zu bezeichnen? 4to. Salzburg, 1881
bezeichnen? 4to. Salzburg, 1881: *Ueber einige Relationen zwischen den Combinations-
: *Ueber emige Kentionen zwischen den Comoniacions
summen der Quadrate der geraden und ungeraden Zahlen. Svo.
: Détermination de longitude, see Loewy et Oppolzer.
Ordnance Survey, see United Kingdom.
Orff (Colonel von) et E. Plantamour;
Différence de longitude entre les observatoires de Genève et
de Bogenhausen près Munich. 4to. Genève, 1879
Oriani (Barnaba):
*Elementi di trigonometria sferoidica. 4to. Bologna, 1806
Oriani (Barnaba) e Giuseppe Piazzi:
*Corrispondenza Astronomica. fol. Milano, 1874
Origanus (David):
: Ephemerides novæ annorvm xxxvi, incipientes ab anno
Xοιστογενείας 1505, quo Ioannis Stadii maxime aberrare
incipiunt, & desinentes in annum 1630. Quibus præmissa
est introductio, sev compendiaria Ephemeridum enarratio.
4to. Francofurti ad Viadrum, 1599
: Novæ motuum cœlestium Ephemerides Brandenbyrgicæ
annorym Lx, incipientes ab anno 1595, & desmentes in
annum 1655 (1624) cum introductione pleniore,
in qua Chronologica, Astronomica & Astrologica ex funda-
mentis ipsis tractantur.
Vols. 1 and 2, 4to. Francofurti cis Viadrum, 1609
Ormathwaite (Lord):
Astronomy and geology compared. 8vo. London, 1872
1
Orontius Finæus, see Finæus.
Orsan (A. Le Vongour d'):
Our satellite: a sclenography according to the present state
of science. No. 1. fol. London, 1862

## Ossipofsky (T.):

Recherches sur les phénomènes lumineux qu'on aperçoit quelquefois au ciel dans des positions déterminées par rapport au soleil ou à la lune.

4to. St. Pétersbourg, 1828

Oswaldus, Comet 1652-53, see Macovius.

## Ottley (William Young):

\*Observations on a manuscript in the British Museum . . . . containing Cicero's translation of the Astronomical poem by Aratus, accompanied by drawings of the constellations.

4to. London, 1835

#### Otto (Andreas):

De Terra. [Inaugural Dissertation.] 4to. 1659

## Oudemans (Johann Abraham Christian):

- Dissertatio astronomica inauguralis, exhibens observationes, ope instrumenti transitorii portabilis institutas.
- 4to. Lugduni Batavorum, 1852
  ——: \*Mémoire sur l'orbite de la comète périodique découverte
- par M. d'Arrest le 27 Juin 1851. 4to. Amsterdam, 1854.—: \*Zweijæhrige Beobachtungen der meisten jetzt bekannten
- verænderlichen Sterne. 4to. Amsterdam, 1856
  ——: Verslag van de geographische dienst in Nederlandsch
- Indië, 1858–59.

  Verslag van de bepaling der geographische ligging van
- die plaatsen op Java, waar telegraafkantoren gevestigt zijn.

  Verslag van de bepaling der geographische ligging van die plaatsen op Java, waar telegraafkantoren gevestigt zijn.
- : Die Triangulation von Java, ausgeführt vom Personal des geographischen Dienstes in Niederländisch Ost-Indien. Abtheilung 1, 2. 4to. Batavia und Haag, 1875–78
- ---: Détermination, à Utrecht, de l'azimut d'Amersfoort.
- 4to. La Haye, 1881
  ——: \*Sur une meilleure méthode pour faire les mesures héliométriques à l'occasion d'un passage de Vénus sur le soleil.

8vo. Amsterdam, 1876

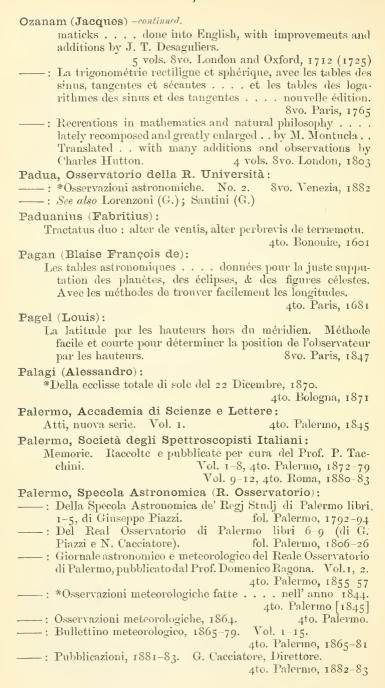
# Oughtred (William):

- —: The key of the mathematicks new forged and filed; together with a treatise of the resolution of all kinde of affected aquations in numbers, with the rule of compound usury, . . . and a most easie art of delineating all manner of plaine Sun-Dyalls. 2 parts in 1 vol. 8vo. London, 1647
- ——: Trigonometrie, or the manner of calculating the sides and angles of triangles, by the mathematical canon demonstrated.

  4to. London, 1657
- : Opuscula mathematica hactenus inedita. 8vo. Oxonii, 1677
- : Clavis mathematicæ denuo limata, sive potius fabricata, cum aliis quibusdam ejusdem commentationibus (Elementi decimi Euclidis declaratio; de solidis regularibus; Theorematum in libris Archimedis de sphæra & Cylindro declaratio, Horologia scioterica). Editio quinta.

4 parts in 1 vol. Oxoniæ, 1693

Outhier (Reginald):
— : Journal d'un voyage au nord en 1736 & 1737.
4to. Paris, 1744
—: Ditto. 12mo. Amsterdam, 1746
Overley (Isaae):
Measuring made easy (with a table of logarithms).
8vo. London, 1739
Oxford, Radeliffe Library:
: Catalogue of books on Natural Science to 1872.
4to. Oxford, 1877
: Additions, to 1883. 4to. Oxford.
Oxford, Radeliffe Observatory:
—: Astronomical Observations made in the years 1840-
52 by Manuel J. Johnson. Vol. 1-13. 4to. Oxford, 1842-54
: Astronomical and meteorological observations made
in the years 1853-64, under the superintendence of Manuel
J. Johnson (and the Rev. Robert Main). Vol. 14-24. 4to. Oxford, 1855-67
-: Results of Astronomical and meteorological observations
made in the years 1865–80 under the superintend-
ence of the Rev. Robert Main (and Edward James Stone).
Vol. 25–38. 4to. Oxford, 1868–83
-: Report of the Radcliffe Observer to the Board of Trustees,
1861–75. 4to. Oxford, 1861–75
: Ditto, 1883. 4to. Oxford, 1883
: The Radcliffe catalogue of 6317 stars, chiefly circumpolar,
reduced to the epoch 1845.0, formed from the observations
made under the superintendence of Manuel John Johnson with introduction by the Rev. Robert
Main. 4to. Oxford, 1860
- : Second Radeliffe Catalogue, containing 2386 stars; deduced
from Observations extending from 1854 to 1861
reduced to the epoch 1860, under the superintendence of
the Rev. Robert Main. 4to. Oxford, 1870
Oxford, University Observatory:
- : Report of the Savilian Professor of Astronomy to the Board
of Visitors, 1877–82. 4to. Oxford, 1877–82
: Astronomical Observations made under the direction
of C. Pritchard. No. 1. 8vo. Oxford, 1878
Oxley (Thomas):
The gem of the astral sciences, or mathematics of celestial
philosophy. Svo. London [1848]
Ozanam (Jaeques):
- : Récréations mathématiques et physiques, qui contiennent
plusieurs problèmes d'arithmétique, de géométrie, d'optique,
de gnomonique, de cosmographie, de mécanique, de pyrotechnie, & de physique. 2 vols. 8vo. Paris, 1694
- : Usage de l'Instrument universel, pour résoudre promtement
& très-exactement tons les problèmes de la géométrie
pratique sans ancun calcul. 8vo. Paris, 1700
: Cursus mathematicus; or a compleat course of the mathe-

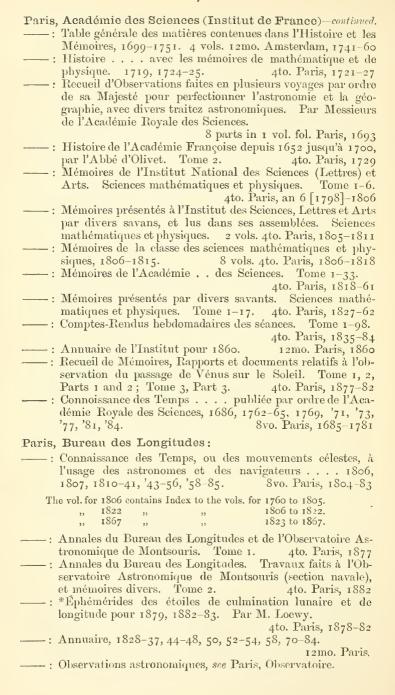


: Annuario, 1842-46. Anno 1-5. 12mo. Palermo : Effemeridi astronomiche di Palermo, 1855-56, pubblicate
dal Prof. Ragona. 8vo. Palermo, 1854-55
: Storia Celeste dal 1792 al 1813.
9 vols. Vienna, 1845-49 Vol. 4-12 of 'Annalen der K. K. Sternwarte in Wien,' Scr. 2.
- : See Martina (L.), Piazzi (G.), Riccò (A.).
Palladium (the), Gentleman and Lady's Palladium, British
Palladium [&c.], 1749-65, 1771-79. 12mo. London, 1749-79 Many changes of title.
Palmer (John):
The Catholique planispher, which Mr. Blagrave calleth the mathematical jewel, briefly and plainly described, in five books Hereunto is added a brief description of the cros-staf, and a catalogue of eclipses. 4to. London, 1658
Palmieri (L.):
Incendio Vesuviano, see Guarini (Giovanni).
Pape (Carl Ferd.):
: *Untersuchung über die Erscheinungen des grossen Cometen vom Jahre 1858. 4to. Altona, 1858: *Ueber die Genauigkeit der Beobachtungen der Rectascensionen bei Anwendung chronographischer Apparate.  4to. Altona, 1860
Paramatta Observatory:
: A catalogue of 7385 stars, chiefly in the southern hemisphere, prepared from observations made in the years 1822-26 at the Observatory, Paramatta, New South Wales, founded by Lieut. Gen. Sir T. Brisbane The computations made and the catalogue constructed by W. Richardson.  4to. London, 1835 : See also Rümker (Carl).
Parc Astronomique (Notice sur le) de la Société Technomatique,
où se trouve en ce moment la plus grande lunette du monde. 8vo. Paris, 1856
Pardies (Ignace Gaston):
: Œuvres de mathématique, contenant les élémens de géométrie, discours du monvement local, la statistique, et deux machines propres à fairle les cadrans.
2 parts in 1 vol. 12mo. La Haye, 1690-91  — : Short, but yet plain elements of geometry and plain trigo- nometry rendered into English by John Harris. Second edition.  8vo. London, 1702
Paris, Académie des Sciences (Institut de France):
: Mémoires de mathématique et de physique, 1692–93. Nouvelle édition. 2 vols. 12mo. Amsterdam, 1723

---: Histoire de l'Académie (et Mémoires de mathématique et

12mo. Amsterdam, 1706-69

de physique), 1699 1714; 1716-57.



- Paris, Bureau des Longitudes communed. — : Tables Astronomiques, see Burckhardt; Bouvard; Bouvard et Delambre; Damoiseau; Delambre et Bürg. Paris, Comité International des Poids et Mesures: ---: Procès-Verbaux des séances, 1875-83. Svo. Paris, 1876-84 - : Travaux et Mémoires du Bureau International des Poids et Mesures. Tome 1, 2. 4to. Paris, 1881-83 Paris, Conférence Internationale du Passage de Vénus [1882]: Procès-Verbaux. fol. Paris, 1881 Paris, École Polytechnique: Journal. Cahier 1-9, 11-54. Tome 1-28. 4to. Paris, an III [1795]-1884 Paris, Observatoire: - : Éphémérides des monvemens célestes . . . . pour le méridien de la ville de Paris, 1715–1800. Par Desplaces (La Caille, La Lande). Tome 1, 2, 4–9. 4to. Paris, 1716–92 Histoire Céleste, ou recueil de toutes les observations astronomiques faites par ordre du Rov; avec un discours préliminaire sur le progrès de l'astronomie, par M. Le Monnier. 4to. Paris, 1741 —: Extrait des observations astronomiques et physiques faites par ordre de sa Majesté . . . . 1785-91. Le Comte de 4to. Paris, 1786-91 Cassini, directeur. —: Observations Astronomiques faites à l'Observatoire Royal [1810-28], publiées par le Bureau des Longitudes. Tome fol. Paris, 1825-38 -: Observations Astronomiques [1837-46], publiées par le 10 vols. fol. Paris, 1837-46 Bureau des Longitudes. — : Atlas des mouvements généraux de l'Atmosphère, 1864-65. obl. fol. Paris, 1868-69 —— : Atlas des orages de l'année 1865. fol. Paris, 1866 ---: Atlas météorologique. 1866 74. fol. Paris, 1867-75 — : Bulletin astronomique . . . . public par Ch. Delaunay. 8vo. Paris, 1872-73 Tome I (and v.n. of Tome 2). --: Bulletin International. v.n. 4to. Paris, 1875-78 --- : Annales . . . . publiées par U. J. Le Verrier (et sous la direction de M. le Contre-Amiral Mouchez). Mémoires. 4to. Paris, 1855-83 Tome 1-17. Tome I. Le Verrier, Recherches astronomiques (Calcul des fonctions, coordonnées astronomiques; mouvement des corps célestes; calcul des perturbations). 2. Le Verrier, Recherches astronomiques (Développement des fonctions; perturbations; éléments des orbites; étoiles fondamen-
  - Soleil); Lefort, Grandes tables logarithmiques et trigonométriques calculées au bureau du Cadastre. 5. Le Verrier, Recherches astronomiques (Théorie et tables de

3. Villarceau, Détermination des orbites des planètes et des

4. Le Verrier, Recherches astronomiques (Théorie et tables du

comètes; Le Verrier, Recherches astronomiques.

#### Paris, Observatoire-continued.

Mercure); Foucault, Construction des télescopes en verre argenté; Serret, Théorie du mouvement de la terre, anomalie excentrique, &c.; Roche, Atmosphère des comètes.

Tome 6. Le Verrier, Recherches astronomiques (Théorie et tables de Vénus et Mars).

7. Villarceau, Mouvement et compensation des chronomètres; Puiseux, Inégalités à longues périodes; Desains et Charault, Recherches magnétiques; Bourget, Fonction perturbatrice; Villarceau, Lunette méridienne; Loewy, Orbite de la planète Eugénie; Barbier, Thermométrographes.

 Déterminations des longitudes et latitudes; Hoüel, Développement des fonctions; Wolf, Équation personnelle.

- Villarceau, Détermination des longitudes et latitudes; Hirn, Le gyroscope; Bourget, Mouvement vibratoire d'une corde; Sédillot, Astrolabe Persan; Fouqué, Dissolutions salines; Villarceau, Chercheur parallactique; Traversées entre la France et le Mexique.
- 10. Le Verrier, Recherches astronomiques (Actions mutuelles de Jupiter et de Saturne); Wolf et André, Contacts de Mercure et de Vénus avec le bord du Soleil.
- 11. Le Verrier, Recherches astronomiques (Variations séculaires des éléments de Jupiter, Saturne, Uranus et Neptune; Théorie de Jupiter et de Saturne).
- Le Verrier, Recherches astronomiques. (Tables de Jupiter et Saturne).
- Le Verrier, Recherches astronomiques; Cornu, Vitesse de la lumière; Rayet, Observations magnétiques.
- 14. Le Verrier, Recherches astronomiques (Tables d'Uranus et Neptune); Leveau, Comète de d'Arrest; Périgaud, Méthode de Hansen; Gournerie, Observations de Bouguer; Wolf, Description des Pléiades.
- 15. Éloge et travaux de Le Verrier; Leveau, Théorie de Vesta; Villarceau, Pendule à réversion; Tisserand, Fonction perturbatrice, Perturbations de Pallas par Jupiter.
- 16. Callandreau, Perturbations d'une petite planète; Radau, Réfractions astronomiques; Loewy et Périgaud, Etude des flexions du grand cercle méridien; Tisserand, Parallaxe duSoleil; Mouvements séculaires des plans des orbites de trois planètes.
- 17. Gogou, Inégalité lunaire à longue période; Leveau, Mouvement de Vesta; Wolf, Etalous de poids et mesures; Schulhof et Bossert, Orbite de la comète de 1812; Leveau, Comète de d'Arrest.
- ——: Annales . . . . publiées par U. J. Le Verrier (et sous la direction de M. le Contre-Amiral Mouchez). Observations, Tome 1–24 (1800–1869) et Année 1870–80.

  4to. Paris, 1858–83
- ---: Rapport annuel sur l'état de l'Observatoire . . . . 1879-83 . . . . par l'Amiral Mouchez. 4to. Paris, 1880-84
- : Service Météorologique des Ports. Lettre du Directeur . . . . à M. Airy. 4to. Paris, 1860
- : Mémoire sur l'état actuel de l'Observatoire Impérial

Paris, Observatoire -- continued.

présenté par les astronomes à son exc. le Ministre de l'Instruction Publique. 4to. Paris, 1870

—: Notes administratives [par U. J. Le Verrier]. 4to. Paris. ---: Rapport présenté à la Commission d'Inspection par le

- directeur de l'Observatoire (Ch. Delaunay), le 31 Mai,
- ---: Ephéméride pour la recherche de la Comète de 1812 (Pons), par Schulhof et Bossert (1882, Août-1883, Févr.).

2 sheets fol. Paris.

- : Atlas écliptique (par MM. Chacornac, Paul et Prosper Henry, &c.) [incomplete]. 54 sheets, Paris, v.d.

Paris, Société Mathématique de France:

Bulletin. Tome 1-11. Année 1872-83. 8vo. Paris, 1875-83

Paris, Société Philomathique:

—: Bulletin . . . . série 6, 1873-76. Tome 10-12.

8vo. Paris, 1874-77

—: Ditto. Série 7, 1876-83. Tome 1-7. 8vo. Paris, 1877-83

Pariset (G. H.):

Essai sur la nature des orbites des comètes. Svo. Paris, 1867

Parker (George):

Eland's tutor to astrology, or astrology made easie . . . . tenth edition. 12mo. London, 1704

Parker (John A.):

Second lecture on polar magnetism: its astronomical origin. its period of revolution, and the synodical period of the earth identical. 8vo. New York, 1869

Parkhurst (Henry M.):

-: Astronomical tables, comprising logarithms from 3 to 100 decimal places, and other useful tables.

12mo. New York, 1875 12mo. New York, 1881

— : Ditto. Revised edition.

Parkinson (Stephen):

A treatise on optics. Third edition. 8vo. London, 1870

Parkinson and Frodsham:

A brief account of the Chronometer, with remarks on those furnished by P . . . . & F . . . . to the expeditions of Captains Ross, Parry, Sabine, King, Lyon, Foster [&c.]

Svo. London, n.d.

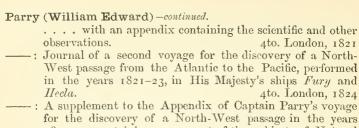
Parpart (A. von):

Bericht an eine Königl. Preuss. Academie der Wissenschaften zu Berlin über die auf der Sternwarte zu Storlus während der Sonnenfinsterniss vom 28. Juli 1851 angestellten astronomischen und meteorologischen Beobachtungen.

8vo. Culm, 1851

Parry William Edward):

—: Journal of a voyage for the discovery of a North-west passage from the Atlantic to the Pacific, performed in the years 1819-20 in His Majesty's ships Hecla and Griper;



for the discovery of a North-West passage in the years
1819-20, containing an account of the subjects of Natural
History.

4to. London, 1824

----: Appendix to Captain Parry's Journal of a second voyage for the discovery of a North-West passage from the Atlantic to the Pacific.

4to. London, 1825

## Parry (William Edward), H. Foster, and J. C. Ross:

\*Observations and experiments made at Port Bowen in the years 1824-25 on the figure of the earth, on magnetism, and atmospherical refraction. 4to. London, 1826

## Partridge (John):

----: Μικροπαναστρων; or an astrological Vade Mecum, briefly teaching the whole art of astrology. 12mo. London, 1679

—: Merlinus Liberatus: an almanac for 1726, 1752, 1760-61.

## Partridge (Seth):

The description and use of an instrument, called the double scale of proportion.

8vo. London, 1692

Pascal-Newton (la question). Soupçons d'un Bouquiniste. 8vo. Liège, 1867

## Pasquich (Johann):

Epitome elementorum astronomiae sphaerico-calculatoriae. 2 parts and appendix in 1 vol. 4to. Viennae, 1811

#### Pauilhé (A. O.):

Astronomie des gens du monde, ou exposition du système planétaire avec l'explication des phénomènes célestes. Ouvrage mis à la portée des personnes qui ne sont pas versées dans les mathématiques . . . . Seconde édition.

8vo. Paris, 1824

#### Paul (H. M.):

\*A determination of the semi-diameter of the Moon from two occultations of the Pleiades observed on July 6, 1877, and September 6, 1879.

4to. Washington, 1883

## Payne (William):

— : An introduction to geometry, containing the most useful propositions in Euclid, and other authors. Second edition.

----: Elements of trigonometry, plain and spherical, applied to the most useful problems in heights and distances, astronomy and navigation.

8vo. London, 1772

~ / /
Peacock (D. M.):
A system of conic sections, adapted to the study of natural philosophy. Second edition. 8vo. London, 1817
Peacock (George):
: A collection of examples of the applications of the differen-
tial and integral calculus. Part 1, 2. 8vo. Cambridge, 1820  —: Ditto. Part 3. Examples of the applications of the calculus of
finite differences, by J. F.W. Herschel. 8vo. Cambridge, 1820
-—: Life of Thomas Young. 8vo. London, 1855
Pearson (James):
: *Observations on the phenomena of the tides as observed
at Fleetwood, Lancashire: with illustrations from the tides of Rathmullan, Co. Donegal. 8vo. Dublin, 1877
: *Computation of tides at Fleetwood: results of theory and
observation. 8vo. Dublin, 1878
-: *Computation of tides at Fleetwood: discussion of corre-
sponding phenomena in different years, &c. Computation of occultations and eclipses. 8vo. Dublin, 1879
-: An elementary treatise on the tides, based on that of the
late Sir J. W. Lubbock. 8vo. London, 1881
Pearson (John B.):
A series of observed lunar distances, with explanations and analysis. obl. fol. Cambridge, 1879
Pearson (William):
An introduction to practical astronomy; containing tables
recently computed, for facilitating the reduction of celestial
observations, and a popular explanation of their construction
and use. 2 vols. 4to. London, 1824-29 Pechüle (C. F.):
Expédition Danoise pour l'observation du passage de Vénus,
1882; publié par ordre du ministère de l'Instruction Pu-
blique. 8vo. Copenhague, 1883
Peck William):
The coming transit of Venus on December 6, 1882, illustrated with charts and diagrams. 4to. Edinburgh, 1882
Peirce (Benjamin):
-: *The latitude of the Cambridge Observatory in Massa-
chusetts. 4to. Cambridge, 1846 —: Tables of the moon, constructed from Plana's theory, with
Airy's and Longstreth's corrections, Hansen's two inequali-

form designed by Benjamin Peirce . . . . under the superintendence of C. H. Davis. 4to. Washington, 1853

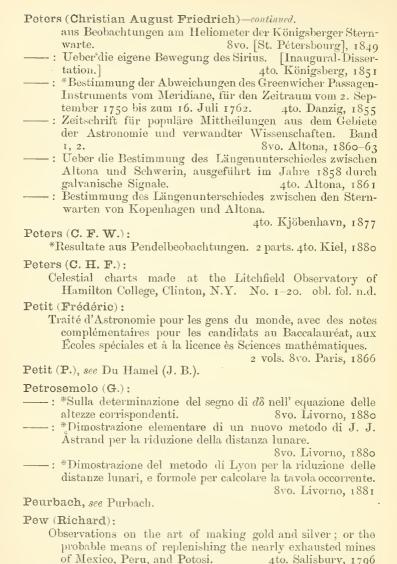
— : Tables of the moon's parallax, constructed from Walker's and Adams's formulæ, arranged as a supplement to the first edition of Peirce's Tables of the Moon, under the superintendence of C. H. Davis. 4to. Washington, 1854

— : Physical and celestial mechanics, . . . developed in four

ties of long period arising from the action of Venus, and Hansen's values of the secular variations of the mean motion and of the motion of the perigec. Arranged in a

Peirce (Benjamin)—continued.
systems of analytic mechanics, celestial mechanics, potentia
physics, and analytic morphology: [Part 1], A system of
analytic mechanics. 4to. Boston, 185
Peirce (C. S.):
—: The papers on logic, read before the American Academy of
Sciences, 1867. 8vo. 186
: Photometric researches, see Harvard College Observatory
: Ellipticity of the earth, see U.S. Coast Survey.
Pekin:
Observationes astronomicæ ab anno 1717 ad annum 1752
patribus Societatis Jesu Pekini Sinarum factæ, et a Augus
tino Hallerstein collectæ atque operis editionem a
fidem autographi manuscripti curante Maximiliano Hell.
2 parts, 4to. Vindobonæ, 176
Pemberton, (Henry):
- : A view of Sir Isaac Newton's philosophy. 4to. London, 172
: See also Robins (B.)
Penny Cyclopædia (the) of the Society for the diffusion of Use
ful Knowledge. 27 vols. roy. 8vo. 1833-4.
: Supplement. 2 vols. roy. 8vo. 185
: Second supplement. roy. 8vo. 185
Penrose (Francis Cranmer):
On a method of predicting by graphical construction occulta
tions of stars by the moon, and solar eclipses, for any given
place fol. London, 186
Peralta (Pedro de):
Observationes astronomicæ habitæ Limæ. (Observatio Lunari
deliquii 1717.) 4to. Limæ, 171
Perigal (Henry):
: Experimental researches in kinematics, designed to exem
plify and elucidate the laws of motion, by the organical
development of their representative, or characteristic curves
the resultants of combinations of movements.
3 vols. 8vo. London, 1838–42
: Notes on the kinematic effects of revolution and rotation
with reference to the motions of the moon and of the earth
8vo. London, 1846–49
: The Moon controversy: facts v. definitions. 8vo. London, 1856
- : Revolution and rotation. 8vo. 1864
: On the misuse of technical terms. (Rotation and revolu-
tion.) 8vo. n.d ——: Classification of bi-circloids, curves of two curvatures (ir
the same plane), the resultants of two circular movements.
8vo. n.d.
Périgaud ( – ) et Maurice Loewy:
: *Détermination de la flexion du cercle méridien de
Bischoffsheim. 4to. Paris, 1881
: *Étude des flexions du grand cercle méridien.
4to Paris 1881

Periódico Mensual de Ciencias Matemáticas y Fisicas. Tomo 1, No. 1-6. 4to. Cadiz, 1848
Perlachius (Andreas): Ephemerides pro anno 1531. 4to. [Viennæ Austriæ, 1530]
Perrey (Alexis):  — : Détermination de l'orbite d'une étoile d'un système binaire dans son mouvement autour de l'autre. 4to. Dijon, 1837  — : Théorie du mouvement d'un corps solide autour d'un point fixe. 4to. Dijon, 1838  — : *Sur la détermination de l'orbite des planètes et des comètes. 8vo. Paris [1853]  Perrier (François) et Maurice Loewy:  *Détermination télégraphique de la différence de longitude entre Paris et Alger. 4to. Paris, 1877
Perrotin (J.): Visite à divers observatoires d'Europe : notes de voyage.  8vo. Paris, 1881
Perry (Stephen Joseph):  —: *Notes of a Voyage to Kerguelen Island to observe the transit of Venus, December 8, 1874. Svo. Roehampton, 1876  —: Report on the meteorology of Kerguelen Island.  4to. London, 1879
Pesaro, Osservatorio Meteorico e Magnetico Valerio: Bullettino Mensile. Serie 2, Vol. 1. 4to. Bologna, 1875
Pesth, see Buda-Pesth.
Petavius (Dionysius):  Uranologion, sive systema variorum authorum qui de sphæra ac sideribus, eorumque motibus Græcè commentati sunt. Sunt autem horum libri:
Gemini Achillis Tatii Phænomena.  Ilipparchi libri tres, ad Aratum. Ptolemæi de apparentiis. Theodori Gazæ, de Mensibus.  Maximi Isaaci Argyri duplex Computi. S. Andreæ Cretensis  Acesserunt variarum dissertationum libri octo.  2 parts in 1 vol. fol. Lutetiae Parisiorum, 1630
Peters (Christian August Friedrich):  — : *Numerus constans nutationis ex ascensionibus rectis stellae polaris in Specula Dorpatensi annis 1822 ad 1838 observatis deductus.  — : *Über Professor Mädler's Untersuchungen über die eigenen Bewegungen der Fixsterne.  — 4to. St. Pétersbourg, 1848  — : *Recherches sur la parallaxe des étoiles fixes.  — 4to. St. Pétersbourg, 1848  — : *Ueber Bessels Bestimmung der Parallaxe von 61 Cygni



Præcepta genethliaca, sive de prognosticandis hominum nativitatibus commentarius eruditissimus. 4to. Francofurti, 1607

Pfaff (J. W.):

Pezelius (Christopher):

——: Das Licht und die Weltgegenden, samt einer Abhandlung über Plancten-Conjunctionen und den Stern der drey Weisen. 8vo. Bamberg, 1821

Pfaff (J. W.)—continued.  —: De dimensione coeli secundum principia W. Herschelii.  [Inaugural dissertation.] 4to. Erlangae, 1825  —: W. Herschels Entdeckungen und die Fortschritte seiner Zeitgenossen in der Astronomie und den ihr verwandten Wissenschaften. Erste Abtheilung. 8vo. Stuttgart, 1828		
Pfeil (L. von): Kometische Strömungen auf der Erdoberfläche. 8vo. Berlin, 1879		
Philadelphia, Academy of Natural Sciences: Proceedings, 1862-70.  8vo. Philadelphia, 1862-70		
Philadelphia, American Philosophical Society for promoting useful knowledge:  —: Transactions, Vol. 1–6. 4to. Philadelphia, 1789–1809  —: New Series, Vol. 1–15. 4to. Philadelphia, 1818–81  —: Proceedings, 1838–82. Vol. 1–20.		
8vo. Philadelphia, 1840-83 : Catalogue of the Library. Part 1-3.		
8vo. Philadelphia, 1868–78  Philadelphia, Franklin Institute:  Journal, Third Series. Vol. 21–87.  8vo. Philadelphia, 1851–84		
Philadelphia, Magnetic and Meteorological Observatory at the Girard College:  *Discussion of the magnetic and meteorological observations made 1840-45. By A. D. Bache.		
24to. Washington, 1859-62  Phillippes (Henry):  The geometrical sea-man; or the art of navigation performed by Geometry Second edition. 4to. London, 16[57]		
Phillips (John):  *Notices of some parts of the surface of the Moon.  4to. London [1868]		
Phillips (Lawrence Barnett):  Horological rating tables for ascertaining the daily rate of watches and chronometers.  4to. London, 1871		
Phillips (Richard):  —: Twelve essays on the proximate causes of the material phenomena of the universe.  Svo. London, 1821  —: Natural philosophy.  Svo. London, 1827  —: Protest against the prevailing principles of natural philosophy, with developement of a common-sense system.		
8vo. London, n.d. : Additional protest in regard to Kepler's laws, especially the first.  8vo. London [1830] : Essay on the physico-astronomical causes of the geological changes on the earth's surface, and of the changes in terrestrial temperature.  8vo. London [1832]		

Phillips (William): Eight familiar lectures on Astronomy, intended as an introduction to the science, for the use of young persons, and others not conversant with the mathematics. 8vo. London, 1817 Philosophical Magazine: ——: Comprehending the various branches of Science, the liberal and fine arts, agriculture, manufactures and commerce. By Alexander Tilloch. Vol. 1-42. 8vo. London, 1798-1813 —: Philosophical Magazine and Journal, comprehending the various branches of Science, the liberal and fine arts, agriculture, manufactures and commerce. By Alexander Tilloch (and Richard Taylor). Vol. 43-68. 8vo. London, 1814-26 - : See Journal of Natural Philosophy. ——: Philosophical Magazine, or annals of chemistry, mathematics, astronomy, natural history and general science. By Richard Taylor and Richard Phillips. (New and united series of the Philosophical Magazine and Annals of Philosophy.) Vol. 1-11. 8vo. London, 1827-32 - : See Annals of Philosophy. -: General Index to the Philosophical Magazine, or annals of chemistry, mathematics, astronomy, natural history and general science, Vol. 1-11. (United series of the Philosophical Magazine and Annals of Philosophy.) Svo. London, 1835 —: The London and Edinburgh (and Dublin) Philosophical Magazine and Journal of Science. Conducted by Sir David Brewster, Richard Taylor, Richard Phillips (and Sir Robert Kane). New and united series of the Philosophical Magazine, (Annals of Philosophy) and Journal of Science. Vol. 1-37. 8vo. London, 1832-50 ---: See Edinburgh Philosophical Journal. ----: General Index to the London and Edinburgh Philosophical Magazine and Journal of Science. Vol. 1-12 (1832-1838). 8vo. London, 1839 ---: The London, Edinburgh and Dublin Philosophical Magazine and Journal of Science. Conducted by Sir D. Brewster, R. Taylor, R. Phillips, Sir R. Kane, and W. Francis. Fourth Series. Vol. 1-50. 8vo. London, 1851-75 - : Ditto. Conducted by Sir R. Kane, Sir W. Thomson, and W. Francis. Fifth Series. Vol. 1-17. 8vo. London, 1876-84

New Series. Vol. 1-8. 8vo. London, 1877-84

Piazzi (Giuseppe):
——: Pracipuarum stellarum inerrantium positiones mediæ

---: Including the Transactions of the Photographic Society.

A voyage towards the North Pole, 1773. 4to. London, 1774 Photographic Journal (Journal of the Photographic Society).

8vo. London, 1854-76

Phipps (Constantine John):

Vol. 1–16.

Piazzi (Giuseppc)—continued.
ineunte seculo XIX. Ex observationibus habitis in specula
Panormitana ab anno 1792 ad annum 1802.
fol. Panormi, 1803 : Praecipuarum stellarum inerrantium positiones mediae
ineunte saeculo XIX. Ex observationibus habitis in specula
Panormitana ab anno 1792 ad annum 1813.
fol. Panormi, 1814
: *Further list of errors in Piazzi's Catalogue of Stars. Svo. London
: See also Bianchi (G.); Littrow (K. L.); Palermo, Specola
Astronomica.
: *Saggio sui movimenti proprii delle Fisse, 4to. Bologna, 1804
[—]: Della Cometa del 1811. Osservata nella specola di Palermo dai 9 Settembre ai 11 Gennaro 1812 Svo. Palermo, [1812]
—: Lehrbuch der Astronomie Aus dem Italienischen
übersetzt von J. H. Westphal. 2 vols. 8vo. Berlin, 1822
—: Eloges sur, see Campagna (G.); Filipponi (A.)
Piazzi (Giuseppe) e Oriani (Barnaba):
*Corrispondenza Astronomica. 4to. Milano, 1874
Picard (Jean), P. L. M. de Maupertuis [and others]:
Degré du Méridien entre Paris et Amiens, déterminé par la mesure de M. Picard, et par les observations de M <sup>rs</sup> de
Maupertuis, Clairaut, Camus, Le Monnier. 8vo. Paris, 1740
Piccolomini (Alessandro):
: De la sfera del Mondo libri quattro: De le stelle
fisse libro vno, con le sve figvre e con le sve tauole.
4to. Venetia, 1548
—: La prima parte dele Theoriche è vero speculationi dei pianeti. 4to. Vinegia, 1558
: De le stelle fisse libro vno, dove di tytte le xLVIII
immagin celesti minutissimamente si tratta et oltre
a questo ci son tavole, con nuoua inuention fabricate.
Pick (Adolf Jos.):  4to. Venetia, 1570
*Über die Sicherheit barometrischer Höhenmessungen.
8vo. Wien, 1855
Pickering (Edward C.):  —: *Dimensions of the fixed stars, with especial reference to
binaries and variables of the Algol type.
8vo. Cambridge, 1880
—: *New planetary Nebulæ. 8vo. New Haven, 1880
: *Large telescopes. 8vo. Boston, 1881
— : *Variable Stars of short period. 8vo. Cambridge, 1881— : *A plan for securing observations of the variable stars.
8vo. Cambridge, 1882
: *The wedge photometer. 8vo. 1882
: *Observations of the transit of Venus, December 5 and 6,
OO and the Theory of Callery Of the Control of the
1882, made at the Harvard College Observatory.  8vo. Cambridge, 1883

Pickering (Edward C.)—continued. — : First circular of instructions for observers of variable stars. 8vo. 1883 ---: \*Sir William Herschel's observations of variable stars. 8vo. 1884 ---: See Harvard College Observatory. Pickering (Edward C.), Arthur Searle & O. C. Wendell: \*Photometric measurements of the variable stars B Persei and D.M. 81° 25' made at the Harvard College Observatory. 8vo. Cambridge, 1881 Pickering (John): Eulogy on Nathaniel Bowditch . . . . including an analysis of his scientific publications. 8vo. Boston, 1838 Pickering (William H.): \*Photometric researches. 8vo. Cambridge [U.S.], 1880 Piddington (Henry): ---: \*Researches on the gale and hurricane in the Bay of Bengal, June 3-5, 1839. 8vo. Calcutta, 1839 ---: Notes on the law of storms, as applying to the tempests of the Indian and Chinese seas. 8vo. Calcutta, 1840 Piedmont and Savoy: Opérations géodésiques et astronomiques pour la mesure d'un arc du parallèle moyen, exécutées en Piémont et en Savoie par une Commission composée d'officiers et d'astronomes Piémontais et Autrichiens, en 1821-23. 2 vols. 4to. Milan, 1825 Pietermaritzburg: Meteorological Observations made . . . . during 1863-65. (By R. J. Mann.) Pigorini (Pietro): \*Necrologia del Prof. A. Colla. 8vo. Parma, 1857 Pihl (O. A. L.): — : Micrometric examination of stellar cluster in Perseus. 4to. Christiania, 1869 8vo. Christiania, 1878 ---: \*On magnets. Pilarik (Esaias) et Matthias à Schmidegg: Dissertatio astronomica de eclipsi Lune. [Inaugural Disser-4to. Wittebergae, 1680 tation. Pina Vidal (Adriano Augusto de):

Tratado elementar de optica. 8vo. Lisboa, 1874

Pingré (Alex. Guillaume):
Cométographie, ou traité historique et théorique des comètes.
2 vols. 4to. Paris, 1783-84

Pisa:

Observationes siderum habitæ Pisis in Specula Academica ab anno LXXIV ad annum XC vertentis sæculi XVIII
. . . . in lucem editæ a Josepho (et Francisco) Slop de Cadenberg.

4 vols. 4to. Pisis, 1778-95

# Pitatus (Petrus):

Almanach Novym . . . . superadditis annis quinque supra ultimas hactenus in lucem editas Ioannis Stæfleri Ephe-meridas 1551 ad futurum Christi annum 1556. Isagogica in

cœlestem Astronomicam disciplinam; tractatus tres per breues de electionibus, renolutionibus annorum, & mutation æris: item horariæ tabulæ. 4to. Tubingæ, 154.
Pitiscus (Bartholomæus):  —: Trigonometriæ, sive de dimensione triangulorum libr quinque; item problematum variorum, nempe geodæticorum altimetricorum, geographicorum, gnomonicorum, astronomi corum libri decem Editio secunda (access. Canon Triangulorum).  2 parts, 4to. Augustæ Vindelicorum, 1608 (1609)  —: Ditto. Editio tertia, cui recens accessit problematum archi tectonicorum liber unus.  3 parts, 4to. Francofurti, 1612
Pittei (Costantino):
: Rapports présentés au deuxième Congrès Météorologique International de Rome. 8vo. Florence, 1879
Plana (Giovanni):  —: *Mémoire sur l'intégration de l'équation linéaire  (1) $\frac{d^ny}{dx^n} + A_{n-1} \frac{d^{n-1}y}{dx^{n-1}} + A_{n-2} \frac{d^{n-2}y}{dx^{n-2}} \cdot + A_1 \frac{dy}{dx} + A_0 = 1$ dans le cas particulier où le polynome $Z = z^n + A_{n-1} z^{n-1} + A_{n-2} z^{n-2} \cdot . \cdot + A_1 z + A_0$ renferme un nombre quelconque de racines égales. 4to. Torino, 1821  : *Note sur un mémoire de M. de Laplace, ayant pour titre
Sur les deux grandes inégalités de Jupiter et Saturne. 4to. Torino 182
- : *Mémoire sur la partie coëfficient de la grande inégalité d Jupiter et Saturne qui dépend du carré de la force pertur batrice. 2 parts, 4to. Turin, 1828-2. - : *Méthode élémentaire pour découvrir et démontrer la pos
sibilité des nouveaux théorêmes sur la théorie des trans cendantes elliptiques publiés par M. Jacobi. 4to. Torino 182
: *Mémoire sur le développement des termes du cinquièm ordre qui font partie du coëfficient de la grande inégalité d Jupiter et Saturne. 4to. Turin, 183
- : Théorie du mouvement de la lune. 3 vols. 4to. Turin, 183 - : *Mémoire sur le mouvement d'un pendule dans un milie résistant. 4to. Turin, 183 - : *Mémoire sur trois intégrales définies. 4to. Bruxelles, 183

-: \*Mémoire sur une nouvelle manière de déterminer les intégrales définies . . . . 8vo. Bruxelles, 1837 ----: "Mémoire sur la chaleur des gaz permanens.

4to. Turin, 1842

---: \*Recherches analytiques sur la découverte de la loi de la

Plana (Giovanni)—continued.
pesanteur des planètes vers le soleil, et sur la théorie de
leur mouvement elliptique. 4to. Turin, 1848
: *Mémoire sur l'équation séculaire du moyen mouvement
de la lune. 4to. Turin, 1856
: *Mémoire sur un rapprochement nouveau entre la théorie
moderne de la propagation linéaire du son, et la
théorie des pulsions, exposée par Newton. 4to. Turin, 1857
: *Mémoire sur le mouvement conique à double courbure
d'un pendule simple dans le vide. 4to. Turin, 1858
: *Note sur le procès de Galilée. 4to. Turin, 1858
: *Mémoire sur la théorie des nombres. 4to. Turin, 1860
: [Four letters to Sir J. W. Lubbock on the secular accelera-
tion.] 4to. Turin, 1860
: *Réflexions sur les objections soulevées par Arago contre la
priorité de Calilée pour la double découverte des taches
solaires noires et de la rotation uniforme du globe du
Soleil. 4to. Turin, 1860
: *Mémoire sur l'intégration des équations différentielles
relatives au mouvement des comètes établies suivant
l'hypothèse de la force répulsive définie par Monsieur Faye,
et suivant l'hypothèse d'un milieu résistant dans l'espace.
4to. Turin, 1861
: *Mémoire sur la loi du refroidissement des corps sphériques,
et sur l'expression de la chaleur solaire dans les latitudes
circumpolaires de la terre. 4to. Turin, 1863
: *Mémoire sur l'expression du rapport, qui (abstraction faite de la chaleur solaire) existe, en vertu de la chaleur
d'origine, entre le refroidissement de la masse totale du
globe terrestre et le refroidissement de la masse totale du globe terrestre et le refroidissement de sa surface.
globe terrestre et le refroidissement de sa surface.  4to. Turin, 1863
. , ,
Planets (Method of Finding the Rotary Motions of the).
8vo. Circular, n.d.
Plantamour (Émile):
: *Sur la détermination des hauteurs par le baromètre.
8vo. Genève, 1855
: *De la température à Genève d'après vingt années d'obser-
vations (1836 à 1855). 4to. Genève, 1857
: *Note sur la comète de Donati. 8vo. Genève, 1858
: *Mesures hypsométriques dans les Alpes, 4to. Genève, 1860
: *Observation de l'éclipse totale de soleil du 18 Juillet 1860
à Castellon de la Plana (Espagne). 8vo. Genève, 1860
- : Du climat de Genève. 4to. Genève, 1863
: *Note sur les variations périodiques de la température et
de la pression atmosphérique au Grand StBernard.
8vo. Genève, 1862
: *Recherches sur la distribution de la température à la surface de la Suisse pendant l'hiver 1863-64. 8vo. Zurich, 1864
: *Expériences faites à Genève avec le pendule a reversion.  4to. Genève, 1866
: *Des anomalies de la température observées à Genève
1826–65. 4to. Genève, 1867

Plantamour (Émile) - continued.

: Nouvelles expériences faites avec le pendule à réversion, et détermination de la pesanteur à Genève et au Righi-Kulm.

— : Observations faites dans les stations astronomiques Suissés.
4to. Genève, 1873

Recherches expérimentales sur le mouvement simultane d'un pendule et de ses supports. 4to. Genève, 1878

— : See Geneva Observatory; Hirsch et Plantamour.

# Plantamour (Émile) et A. Hirsch:

Détermination télégraphique de la différence de longitude entre des stations Suisses. 4to. Genève, 1872

# Plantamour (Émile) et Moritz Löw:

Détermination télégraphique de la différence de longitude entre Genève et Strasbourg, exécutée en 1876.

4to. Genève, 1879

4to. Genève 1872

# Plantamour (Émile) et Colonel von Orff:

Détermination télégraphique de la différence de longitude entre les Observatoires de Genève et de Bogenhausen, près Munich, exécutée en 1877. 4to. Genève, 1879

# Plantamour (Émile) et Rudolf Wolf:

Détermination télégraphique de la différence de longitude entre l'Observatoire de Zurieh et les stations astronomiques du Pfänder et du Gäbris. 4to. Genève, 1877

# Plantamour (Émile), R. Wolf et A. Hirsch:

Détermination télégraphique de la différence de longitude entre la station astronomique du Righi-Kulm et les observatoires de Zurich et de Neuchatel. 4to. Genève, 1871

# Plantamour (Ph.):

\*Sur le déplacement de la bulle des niveaux à bulle d'air.
4to. Paris, 1878

### Plarr (Gustave):

----: Essai d'une théorie de la figure de la terre, basée sur le calcul de l'attraction des sphéroïdes hétérogènes. [Inaugural Dissertation.] 4to. Strasbourg, 1850

— : Sur le calcul de la chalcur solaire reçue en un point quelconque de la surface de la terre, dans l'hypothèse d'une absorption de la chalcur par l'atmosphère. 4to. Paris [1856]

### Playfair (James):

A system of chronology.

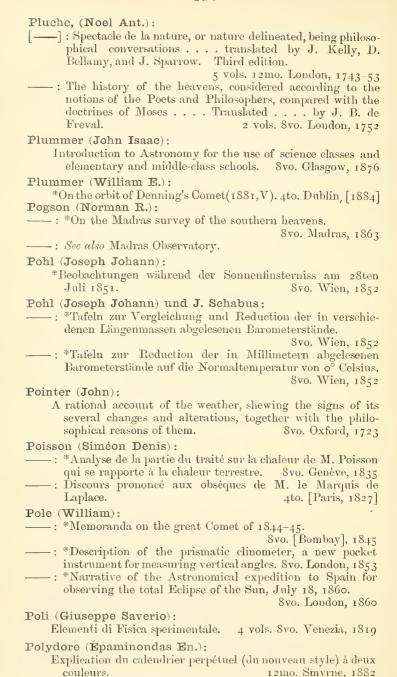
fol. Edinburgh, 1784

# (Playford, John):

Vade mecum, or the necessary companion. Containing Sir S. Morland's perpetual almanac [&c.]. 8vo. London, 1680

### Pliny (Plinius Secundus):

The historic of the world, commonly called the Naturall Historic of C. Plinivs Secundus. Translated into English by Philemon Holland. 2 vols. in t, fol. London, 1601



# [Pombrient (l'Abbé de)]:

Nouvelles vues sur le système de l'univers. Svo. Paris, 1751

### Pond (John):

Observations and Catalogue, see Greenwich.

### Pontanus (Joannes Jovianus):

Liber de Meteoris : cum interpretatione Viti Amerbachij. 8vo. Argentorati, 1539

Pontécoulant (Philippe Gustave Doulcet de):

- : A history of Halley's Comet; with an account of its return in 1835, and a chart, showing its situation in the heavens.

  Translated . . . . by C. Gold. 12mo. London, 1835
- : \*Mémoire sur la théorie de la lune, et spécialement sur les inégalités lunaires à longues périodes. 8vo. Paris, 1837
- : Traité élémentaire de physique céleste, ou précis d'Astronomie théorique et pratique, servant d'introduction à l'étude de cette science. 2 vols. 8vo. Paris, 1840
- Populäre Astronomie für Alle, welche ohne mathematische Vorkenntniss über die Einrichtung des Weltgebäudes theoretisch und praktisch vollkommen belehrt sein wollen.
   . . . Aus dem Französischen von F. Nork.
  - 2 vols. 12mo. Stuttgart, 1846
- —— : Théorie analytique du système du monde.
- 4 vols. (Vol. 1 and 2, second edition). Svo. Paris, 1856-46

  ---: \*Notice sur la comète de Halley et sur ses apparitions

# successives de 1531 à 1910. 4to. Paris, 1864

# Porro (J.):

La Tachéométrie, ou l'art de lever des plans et de faire les nivellements avec beaucoup de précision, et une économie de temps considérable. Nouvelle édition. 8vo. Paris, 1858

# Porta (Joannes Baptista):

De Æris transmutationibus libri IIII. 4to. Romæ, 1614

# Portius (Leonardus):

De Sestertio, Talentis, Pecunijs, ponderibus, mensuris, stipendijs militaribus antiquis, ac provinciarum regum populi Romani . . . . libri duo. 4to. n.d.

### Portraits:

Volume containing various portraits (chiefly of Astronomers) and other prints. fol.

### Postel (Guillaume):

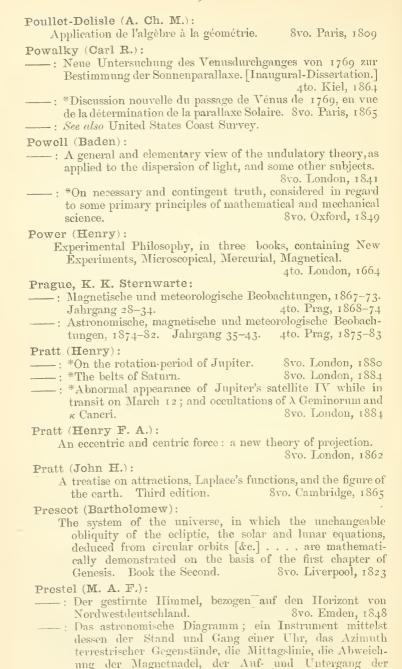
Signorym Coelestivm vera configuratio avt asterismus, stellarúmve per suas imagines aut configurationes dispositio, & in eum ordinem quem illis Deus præfixerat, restitutio et significationum expositio. 4to. Parisiis, 1553

# Potsdam, Astrophysikalisches Observatorium:

Publicationen. Band 1-3. 4to. Potsdam, 1879-83

### Potter (John):

---: A system of practical mathematics.
Second edition.
8vo. London, 1753
8vo. London, 1757



Prestel (M. A. F.)—continued.

Gestirne bestimmt und andere Aufgaben . . . . gelöst werden können.

8vo. [with diagram in fol.]. Braunschweig, 1859

Preuss (E. W.):

Astronomische Beobachtungen auf des Herrn Capitain Otto v. Kotzebue zweiten Reise um die Welt in den Landungsplätzen angestellt. . . . Herausgegeben von W. Struve.

4to. Dorpat, 1830

Price (Arthur Wellington):

A familiar treatise upon the Longitude, determining and simplifying by easy rules the best methods by which accuracy and facility can be ensured, particularly at sea.

8vo. London, 1854

Price (Bartholomew):

A treatise on infinitesimal calculus, containing differential and integral calculus, calculus of variations, applications to algebra and geometry and analytical mechanics.

Vol. 1. Differential calculus. 4 vols. 8vo. Oxford, 1852-62

. I. Dimerential calculus.

- 2. Integral calculus and calculus of variations.
- 3. Statics and dynamics of material particles.
- 4. The Dynamics of material systems.

Priestley (Joseph):

- : The history and present state of discoveries relating to vision, light, and colours. 4to. London, 1772
- : Experiments and observations on different kinds of air, and other branches of natural philosophy connected with the subject.

  3 vols. 8vo. Birmingham, 1790

Prince (Charles Leeson):

——: Observations upon the climate of Uckfield, constituting a meteorological record for the district from 1843 to 1870.

8vo. London, 1871
——: Observations—upon the late great ('omet [1882 II] and

transit of Venus, made at Crowborough, Sussex, in the year 1882.

Svo. Lewes, 1883

Pritchard (Charles):

—: \*Eloge of Struve, astronomer of Dorpat and Pulkowa.

8vo. London, 1865

—: \*Sir John Herschel. An éloge read at the anniversary meeting of the Royal Astronomical Society.

8vo. London, 1872

Probert (John), method of calculating an eclipse, see Fenning (D.). Proclus (Diadochus):

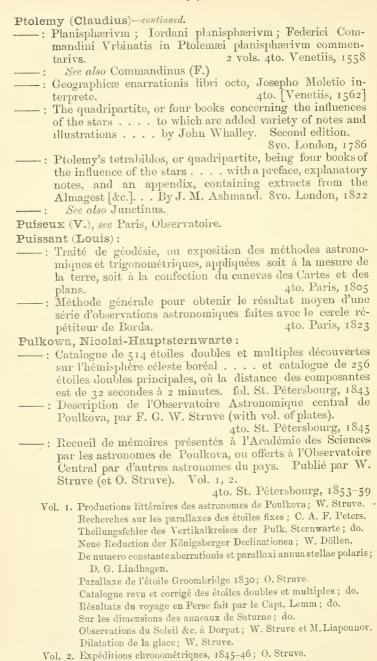
— : Sphæra, Astronomiam discere incipientibus utilissima, nouiter ex græco recognita. 4to. Bononiæ, 1525 (1526)

— : De sphæra, see Henischius (G.); Valderus (J.).

—: Philosophical and mathematical commentaries . . . . on the first book of Euclid's Elements: to which are added a history of the restoration of Platonic Theology by the latter Platonists, and a translation from the Greek of Proclus's Theological Elements. 2 vols. 4to. London, 1792

	or (Richard Anthony):
:	Saturn and its system: containing discussions of the motions (real and apparent) and telescopic appearance of the planet Saturn its cotallites and singular the return of
	the planet Saturn, its satellites, and rings; the nature of the rings; the 'great inequality' of Saturn and Jupiter; and the habitability of Saturn.  8vo. London, 1865
:	The handbook of the stars: containing the places of 1500 stars, from the first to the fifth magnitude inclusive
	8vo. London, 1866 The stars, in twelve maps on the gnomonic projection,
	collected, in duplicate, in four plates. fol. London, 1866
:	The constellation-seasons, an easy guide to the knowledge
	of the stars; exhibiting, in twelve planispheres, the appearance of the heavens at any hour of the night all the year round.  4to. London, 1867
:	Sun-views of the earth, or the seasons illustrated.
	4to. London, 1867
:	Remarks on Browning's Stereograms of Mars.  8vo. London, 1869
:	A star atlas for the library, the school, and the observa-
	tory. Showing all the stars visible to the naked eye
	in twelve circular maps on the equidistant projection
	with two index plates. fol. London, 1870 Ditto. Fourth edition. fol. London, 1877
:	Light science for leisure hours. A series of familiar essays
	on scientific subjects, natural phenomena, &c., &c.
:	The Sun: ruler, fire, light, and life of the planetary system.
	8vo. London, 1871 Ditto. Third edition. 8vo. London, 1876
	Essays on astronomy; a series of papers on planets and
	meteors, the Sun and Sun-surrounding space, stars and star
	cloudlets: and a dissertation on the approaching transits of
	Venus. Preceded by a sketch of the life and work of Sir John Herschel.  8vo. London, 1872
:	7 7 7 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1
·	condition. Svo. London, 1873
	Ditto. Second edition. 8vo. London, 1878
:	The orbs around us: a series of familiar essays on the Moon and planets, meteors and comets, the Sun and coloured
	pairs of suns. Second edition. 8vo. London, 1875
:	A new star atlas for the library, the school, and the
	observatory, in twelve circular maps, with two index
	plates. Fourth edition. 8vo. London, 1875
:	Half-hours with the stars: a plain and easy guide to the knowledge of the constellations Eighth edition.  4to. London, 1877
:	The Spectroscope and its work.  8vo. London, 1877
	Simple lessons for home use: Astronomy.
	12mo. London, 1877
:	Other worlds than ours: the plurality of worlds studied under the light of recent scientific researches Fourth
	edition Syn London 1878

Proctor (Richard Anthony)—continued.
-: Half-hours with the telescope; a popular guide to the use
of the telescope as a means of amusement and instruction
Sixth edition. Svo. London, 1878
: The universe of stars: presenting researches into, and
new views respecting, the constitution of the heavens.
Second edition. Svo. London, 1878
: Transits of Venus. A popular account of past and coming
Transits from the first observed by Horrocks A.D. 1639 to
the transit of A.D. 2012 Third edition.
8vo. London, 1878
Prowe (Leopold):
— : Zur Biographie von Nicolaus Copernicus I. Ueber die Thorner Familien Koppernigk und Watzelrode. II.
die Thorner Familien Koppernigk und Watzelrode. II.
Ueber die Zeit der Geburt und des Todes von Nicolaus
Copernicus. 4to. Thorn, 1853
: Nicolaus Copernicus in seinen Beziehungen zu dem Herzoge
Albrecht von Preussen. Vortrag gehalten am 19.
Februar 1855. Svo. Thorn, 1855
— : De Nicolai Copernici patria. 4to. Thoruni, 1860
: *Die Abhängigkeit des Copernicus von den Gedanken
griechischer Philosophen und Astronomen. 8vo. Thorn, 1865
: Nicolaus Coppernicus. Band 1: das Leben. Theil 1, 2.
8vo. Berlin, 1883
Ptolemy (Claudius):
: Almagestū Cl. Ptolemei Pheludiensis Alexandrini Astro-
nomorum principis: Opus ingens ac nobile omnes Celorū
motus continens. Felicibus Astris eat in lucem : Ductu Petri
Liechtenstein Coloniësis Germani. fol. Venetiis, 1515
: Κλ. Πτολεμαίου Μεγάλης Συντάξεως Βιβλ. ιγ΄ Θέωνος 'Αλεξαν-
δρέως εἰς τὰ αὐτὰ Ὑπομνημάτων Βιβλ. ιά. [S. Grynæo et J.
Camerario editoribus.] 2 parts in 1 vol. fol. Basileæ, 1538
- : Κλαυδίου Πτολεμαίου Μαθηματική Σύνταξις. Composition
Mathématique (ou Astronomie Ancienne): traduite
pour la première fois du Grec en Français par
M. Halma, et suivie des notes de M. Delambre. [Gr. & French.] 2 vols. 4to. Paris, 1813-16
French.] 2 vols. 4to. Paris, 1813-16: Etat des étoiles fixes au second siècle, par Claude Ptolémée,
comparé à la position des mêmes étoiles en 1786, avec le
texte gree & la traduction françoise, par M. l'Abbé Mon-
tignot. 4to. Strasbourg, 1787
- : Περὶ κριτηρίου καὶ ἡγεμονικοῦ Tractatvs de ivdicandi
facyltate et animi principaty. Access. de illius patria &
astronomiæ sedibus Olympiodori & Theodori testimonia
nune primum in lucem edidit, Latine reddidit, & commen-
tariis illustranit Ismael Byllialdus. 4to. Parisiis, 1663
-: 'Αρμονικών Βιβλ.γ'. Harmonicorum libri tres nune
primum Grace editus. Johannes Wallis edidit.
4to. Oxonii, 1682
—: Omnia quæ extant opera, præter Geographiam summa
cura & diligentia castigata ab Erasmo Osualdo Schrekhen-
fuchsio, & ab eodem Isagoica in Almagestum prefatione
fol. Basileae, 1551
,,,,,



Positions géographiques; do. Beobachtungen des Biela'schen Cometen, 1852; do.

Pulkowa, Nicolai-Hauptsternwarte - continued.
—: Übersicht der Thätigkeit der Nicolai-Hauptsternwarte während der ersten 25 Jahre ihres Bestehens, von Otto
Struve. 4to. St. Petersburg, 1865: Observations de Poulkova, publiées par Otto Struve. Vol.
1-7, 9, 11, 13. 4to. St. Pétersbourg, 1869-81
Vol. 9. Contains:—
Observations des étoiles doubles du catalogue de W. Struve; O. Struve.
Observations des étoiles doubles découvertes à Poulkova; do.
: Ascensions droites moyennes des étoiles principales pour l'époque 1845 o (extr. du vol. 1 des Observations).
4to. St. Pétersbourg, 1869 ——: Déclinaisons moyennes corrigées des étoiles principales pour
l'époque 1845°, par Magnus Nyrén. (Supplément au vol. 4 des Observations.) 4to. St. Pétersbourg, 1875
: Mesures micrométriques corrigées des étoiles doubles, par Otto Struve. (Supplément au vol. 9 des Observations.)
4to. St. Pétersbourg, 1879
—: Jahresbericht, 1863-68, '71-73, '75-82. 8vo. St. Petersburg, 1863-82
— : Tabulæ refractionum in usum Speculæ Pulcovensis congestæ.  8vo. Petropoli, 1870
: Vierstellige Logarithmen der trigonometrischen Functionen
in Zeit ausgedrückter Winkel. 4to. St. Petersburg, 1882 ——: Librorum in Bibliotheca Speculae Pulcovensis anno 1858
exeunte contentorum catalogus systematicus. Edendum
curavit et praefatus est Otto Struve. 4to. Petropoli, 1860
— : Ditto. Pars secunda, ab Ed. Lindemann.  4to. Petropoli, 1880
: See F. G. W. Struve; O. Struve.
Pullen (Joseph):
A lecture on Astronomy read on the opening of Gresham College, November 2, 1843. 8vo. London, 1843
Purbach (Georg):
: Tabulæ Eclypsium Magistri Georgij Peurbachij, Tabula Primi mobilis Joannis de Monteregio. (Elimatum denuo
& recognitum sūma cum diligentia a Georgio Tunustetter.)
fol. Viennæ, 1514
: Novæ Theoricæ planetarvm Georgii Peurbachij Astronomi
celeberrimi Temporis importunitate & hominum iniuria locis compluribus conspurcatæ, à Petro Apiano iam
ad omnem ueritatem redacta, & eruditis figuris illustratæ. Svo. Ingolstadij, 1528
: Tractatvs Georgii Pevrbachii svper propositiones Ptolemæi
de Sinubus & Chordis : item compositio Tabularum Sinuum & Tabula Sinuum duplices per Regiomon-
tanum. fol. Norimbergæ, 1541
: Theoricae novae planetarym Georgii Pyrbacchii Germani
ab Erasmo Reinholdo Salueldensi pluribus figuris auctae, & illustratæ scholijs Inserta item methodica tractatio
de illuminatione Lune. 8vo. Vitemberge, 1542

Purbach (Georg)—continued.
: Theoricae novæ planetarvm quibus accesserunt Ioannis de Monteregio disputationes, super deliramenta
Theoricarum Gerardi Cremonensis. Item Joannis Essler Specvlvm Astrologorvm Quæstiones verð in
Theoricas Planetarum Purbachij, authore Christiand
Vrstisio. 2 parts, 8vo. Basilee 1506
: Theoriæ novæ planetarum ab Erasmo Reinlhodo Salveldensi plvribvs figvris avetæ et illustratæ scholijs
Inserta item methodica tractatio de illuminatione Lune.
8vo. Wittembergæ, 1601
: See also Junctinus; Nonius: Life, see Gassendi.
Puschl (Carl): Über die latente Wärme der Dämpfe.  8vo. Wien, 1883
Uber die latente Wärme der Dämpfe. 8vo. Wien, 1883 Puteanus (Erycus):
De Cometa Anni MDCXVIII novo mundi spectaculo, Libriduo. Paradoxologia. 12mo. Colonia, 1619
Pyne (Thomas):
A glance at the heavens, or sketch of modern Astronomy. 8vo. London, 1852
Pyramids:
A dissertation on the antiquity, origin, and design of the principal pyramids of Egypt. 4to. London, 1833
Quadrant:
The use of the mathematical instrument called a quadrant
as also the use of a nocturnal Eighth edition.
Quadri (Giovanni Lodovico):  Svo. London, 1722
Tavole gnomoniche per delineare orologi a sole.
4to. Bologna, 1733
Quarterly Journal of pure and applied Mathematics. No. 1, 8vo. London, 1855
Quarterly Journal of Science, and annals of mining, metal-
lurgy, engineering, industrial arts, manufactures, and tech- nology. Edited by James Samuelson and William Crookes
(&e.). Vol. 1-7. Svo. London, 186.1-70
—: Ditto. New Series. Edited by William Crookes. Vol. 1-8.
8vo. London, 1871-78
: Journal of Science, and annals of biology, astronomy, geo-
logy, industrial arts, manufactures, and technology. Edited
by William Crookes. Third Series. Vol. 1-5.
8vo. London, 1879-83 Quetelet (Ernest):
-: *Recherches sur les Médianes. 4to, Bruxelles [1852]
- : *L'éclipse de soleil du 18 Juillet 1860, observations faites
à l'observatoire royal de Bruxelles. 8vo. Bruxelles, 1860
: *Sur le mouvement propre de quelques étoiles.  4to. Bruxelles [1863]
4001 121 ((2010)) 100 31

Quetelet (Ernest)-continued.		
—: *Sur l'Aurore Boréale du 4 Février 1872.		
	Svo. Bruxelles, 1872	
——: *La tempête du 12 Mars 1876.	8vo. Bruxelles, 1876	
——: *Notice sur l'observatoire royal de Br	uxelles.	
	12mo. Bruxelles.	
Quetelet (Ernest), F. Terby, et G. Bern	aerts:	
*Notes sur la Comète de Coggia.	8vo. Bruxelles, 1874	
Quetelet (Lambert Adolphe Jacques):		
: *Résumé d'une nouvelle théorie des		
différentes applications à la théorie d	les projections stéréo-	
graphiques.	4to. Bruxelles [1825]	
: Correspondance mathématique et phys		
Sv	o. Bruxelles, 1827=39	
: *Description de plusieurs observatoire		
. Notes extunites d'un verses scientific	8vo. Bruxelles, 1828	
: Notes extraites d'un voyage scientifiq pendant l'été de 1829.	8vo. Bruxelles, 1830	
-: *Recherches sur l'intensité magnétic		
de l'Allemagne et des Pay-Bas.	4to. Bruxelles, 1830	
: *Lettre sur la construction	de l'Observatoire de	
Bruxelles.	8vo. Bruxelles, 1831	
: *Sur la latitude de l'Observatoire de l	Bruxelles.	
	4to. Bruxelles, 1836	
— : *Mémoire sur les variations diurne et		
pérature, et en particulier de la ter	mpérature terrestre à	
différentes profondeurs. [2 papers.] 4t	o. Bruxelles, 1837-40	
: *Rapport sur les observations de marc		
: *Sur la longitude de l'Observatoire R	4to. Bruxelles, 1838	
Pour la longitude de l'Observatoire It	4to. Bruxelles, 1839	
: *Catalogue des principales apparition	ons d'étoiles filantes	
[2 papers.] 4t	o. Bruxelles, 1839 42	
- : *Second mémoire sur le magnétisme t	terrestre en Italie.	
-	4to. Bruxelles, 1840	
——: *Observations des phénomènes périod	iques, 1841–68.	
	to. Bruxelles, 1841–68	
——: Instructions pour l'observation des ph		
7 11 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	4to. Bruxelles, 1842	
—: Letters on the theory of prob		
the moral and political sciences French by Olinthus Gregory Downes.		
— : *Sur le climat de la Belgique. [2 pa		
	o. Bruxelles, 1849-57	
: *Mémoire sur les variations périodiqu	es et non périodiques	
de la température.	4to. Bruxelles, 1853	
——: *Sur la comète de Donati.	8vo. Bruxelles, 1858	
— : *Eclipse de soleil du 15 Mars 1858.		
: Histoire des Sciences mathématiques		
Belges.	8vo. Bruxelles, 1864	
: Sciences mathématiques et physique		
commencement du viv <sup>e</sup> Siècle	- 8 vo - BruxeHes, 1866 -	

Quetelet (Lambert Adolphe Jacques)—continued. —: Météorologie de la Belgique comparée à celle du globe.
Svo. Bruxelles, 1867 : *Sir John F. W. Herschel. : *Notice sur Charles Babbage. : [16 papers on meteors from Brussels Acad. Bulletin.]  8vo. Bruxelles, 1879  8vo. Bruxelles, 1879  8vo. Bruxelles, 1879  8vo. Bruxelles, 1879  8vo. Bruxelles, 1879
: *Simon Stevin. 4to: Funérailles de. 8vo. Bruxelles, 1874
Quintella (Ignacio da Costa):  Annaes de Marinha Portugueza. Primeira parte. Tomo 1, 2.  4to. Lisboa, 1839-40
Racine (Amédée):  Tables pour calculer la latitude d'un lieu par des observa-
tions de la polaire. 4to. [Paris] 1824 Radau (Rodolphe):
: *Sur un théorème de mécanique. 4to. Paris, 1868 : *Théorème sur les équations différentielles du premier ordre. 4to. Paris, 1868
: See also Paris, Observatoire.
Raganoothachary (Chintamanny): : *On the total eclipse of the sun on December the 11th, 1871, as visible in the Madras presidency.
8vo. London, 1871 : The Transit of Venus [in the form of a dialogue].  8vo. [1874]
: Ditto [in Hindustani and Telugu].
Ragona-Scinà (Domenico):
—: Osservazioni sulla seconda cometa del 1854. 4to. Palermo, 1854
: Lezioni, memorie, ed articoli intorno a varii argomenti di astronomia sferica e teorica. Vol. 1. 8vo. Palermo, 1857: *Rivista meteorologica del 1857. 8vo. 1857
: *Su taluni nuovi fenomeni di colorazione soggettiva. 4to. Palermo, 1858: *Sulla terza cometa del 1854; osservazioni e risultati.
4to. Palermo, 1858 ———————————————————————————————————
toreale del R. Osservatorio di Modena. 8vo. Cherbourg, 1867 : *Stelle meteoriche di Agosto 1867. 4to. Roma, 1867 : See also Palermo, Specola Astronomica.
Rambosson (J.):
Astronomy translated by C. B. Pitman. 8vo. London, 1875
Ramchundra: ——: A treatise on problems of maxima and minima, solved by
algebra. 8vo. Calcutta, 1850 : Ditto. Reprinted under the superintendence of Augustus de Morgan. 8vo. London, 1859

Ramsay (Alexander), see Scientific Roll.	
Ramsbottom (Richard):	
Fractions anatomized, or the doctrine of	of parts made plain and
easy to the meanest capacity.	12mo. London, 1762
Ramsden (Jesse):	
: Description of an engine for dividin	g mathematical instru-
ments.	4to. London, 1777
——: Description of an engine for dividing	g strait lines on mathe-
matical instruments.	4to. London, 1779
Ransome (Arthur) and G. V. Vernon:	
*On the influence of atmospheric chang	ges upon disease.
	4to. Manchester, 1861
Rantzovius (Henricus):	
Catalogys Imperatorym, Regym ac Pi	rincipvm qui astrologi-
cam artem amarunt, ornarunt &	exercuerunt: quibus
additæ sunt astrologicæ quædar	m prædictiones
Adiectvs est præterea tractatus de an edita à Theophilo Silvio.	
*	8vo. Antverpiæ, 1580
Ranyard (Arthur Cowper):	
: *Note on the presence of particles	
atmosphere.	8vo. London, 1879
: Observations made during total sol	
A. C. R (Mem. R.A.S., vol. 4)	1.) 4to. London, 1879
Raper (Henry):	
— : Tables of logarithms to six places, co	ontaining logarithms of
numbers from 1 to 10,000, and c	of sines, tangents and
secants for every half-minute, with	
seconds. : The practice of navigation and Nau	8vo. London, 1846
supplement).	8vo. London, 1840
: Ditto. Second edition.	8vo. London, 1842
: Ditto. Third edition.	8vo. London, 1849
—: Ditto. Fourth edition.	Svo. London, 1852
——: Ditto. Fifth edition.	8vo. London, 1856
: Ditto. Sixth edition.	8vo. London, 1857
Raphson (Joseph):	
Historia fluxionum, sive tractatus or	riginem & progressum
peregregiæ istius methodi brevissim	o compendio (et quasi
synoptice) exhibens.	4to. London, 1715
Rausch (Chr.):	
Populäre Astronomie für Schule und H	aus, 8vo. Liibeck, 1852
Rayet (G.):	aus. 610. Hastell, 1055
: *Les cadrans solaires coniques.	8vo. Paris, 1875
-: *Rapport sur une mission astronomic	
. Tupport war allo mission astronomis	
	OVO, ERFIS, 1070
— : *Observations pluvioniétriques et t	8vo. Paris, 1876 thermométriques faites
: *Observations pluviométriques et t dans le Département de la Gironde,	thermométriques faites
	thermométriques faites 1882–83. 8vo. Bordeaux, 1883

300 (Raymond H.): Leçons d'un père à son fils, sur les systèmes du monde; ou l'hypothèse Copernicienne démontrée par les machines de Loysel, avec explications. 8vo. Paris, 1805 Rebeur-Paschwitz (Ernst von): Über die Bewegung der Kometen im widerstehenden Mittel, mit besonderer Berücksichtigung der sonnennahen Kometen. Inaugural-Dissertation. 4to. Berlin, 1883 Receard (Gotthilf Christian): Abhandlung von der grossen Sonnen-Finsterniss welche sich im Jahr 1764 ereignen wird. 4to. Berlin, 1763 Recorde (Robert): [---]: The whetstone of witte, whiche is the seconde parte of Arithmetike; containing thextraction of Rootes: the Cossike practise, with the rule of Equation, and the woorkes of surde numbers. 4to. London, 1557 —: The pathewaie to knowledge, containing the first principles of Geometrie, as thei maie moste aptly bee applied vnto practise, bothe for use of instrumentes Geometricall and Astronomicall; and also for projection of plattes of enery 2 parts, 4to. London, 1574 -: Record's arithmetick, or the ground of arts . . . . augmented by John Dee, and since enlarged . . . . by John Mellis. 8vo. London, 1658 Reddie (James): ——: The mechanics of the heavens, and the new theories of the Sun's electro-magnetic and repulsive influence. 8vo. London, 1862 —: Vis inertiæ victa, or fallacies affecting science: an essay towards increasing our knowledge of some physical laws. 8vo. London, 1862 —: Victoria toto celo; or modern astronomy recast: being a

paper on the theoretical motions of the Earth, Sun, Moon, Svo. London, 1863 and planets.

Redhill. Catalogue of 3735 circumpolar stars observed . . . . 1854-56 . . . . by R. C. Carrington. fol. London, 1857

Regiomontanus [Johann Müller]:

-: [Ephemerides astronomicæ, ab anno 1475 ad annum 1506.] (Title wanting.) 4to. [Norimbergæ] 1474

--: Ephemerides (ab anno 1482 ad annum 1506). 4to. Venetiis (E. Ratdolt) 1481

— : Tabule directionū profectionūque . . . . in natiuitatibus multum vtiles (compositæ 1467: Joannis Angeli diligenti correctione). 4to. Augustæ Vindelicorum (E. Ratdolt), 1490

— : Tabylæ directionym profectionumque, non tam astrologiæ iudiciariæ, quam tabulis instrumentisque innumeris fabricandis utiles ac necessariæ. Eiusdem . . . . tabvla sinuum, 4to. Tubingæ, 1550 per singula minuta extensa . . . .

4to. Tubingæ, 1559 ---: Ditto. — : Disputationes contra Cremonensia deliramenta, & Tabula

primi mobilis, see Purbach.

Regiomontanus [Johann Müller]—continued.
—: See also Schoner; Life, see Gassendi.

Reich (Ferdinand):

To all and American in the second in the sec
Reslhuber (Augustin)—continued.  —: *Leistungen eines nach der Erfindung des Herrn K. Kreil construirten Kupferdraht-Thermometrographen.  4to. Wien, 1858
<ul> <li>Untersuchungen über den Druck der Luft. 8vo. Linz, 1858</li> <li>*Bericht über die am 21. und 29. April 1859 zu Kremsmünster beobachteten Nordlichter. 8vo. Wien, 1859</li> <li>*Bericht über die im Jahre 1859 auf dem magnetischen Observatorium zu Kremsmünster beobachteten Störungen.</li> </ul>
8vo. Wien, 1860 : Magnetische Beobachtungen, see Kremsmünster.  Respighi (Lorenzo): : *Sulle osservazioni circumzenitali delle stelle.
4to. Bologna, 1863 : *Sulla latitudine dell' Osservatorio di Bologna.
#Intorno l' influenza del moto dei mezzi rifrangenti sulla direzione dei raggi luminosi. 4to. Bologna, 1863
Dissertatio physica de terræ motuum caussis. [Inaugural Dissertation.] 4to. Tubingæ, 1773  Reuss (Jerem. Dav.):
Repertorium Commentationum a Societatibus litterariis editarum secundum disciplinarum ordinem.  16 vols. 4to. Gottingae, 1801–21
Tomus I. Historia Naturalis. 2. Botanica et mineralogia.

- Chemia.
   Physica.
   Astronomia.
- 6. Œconomia.
- 7. Mathesis, mechanica, &c.
- 8. Historia, geographia, &c.

10-16. Scientia et ars medica et chirurgica.

Revue Scientifique de la France et de l'Étranger:

Rouss (Jerem. Dav.)—continued. Tomus 9. Philologia, &c.

: Série 2. 1871-81. 19 vols. 4to. Paris, 1871-80 : Série 3. 1881-83. Tome 2-6. 4to. Paris, 1881-83 : Table des Matières contenues dans les 14 premiers volumes (1864 à 1874). 8vo. Paris, 1875
Rey (J.):  Himmel und Erde. Erste Einführung in die Himmelskunde und in die mathematische Geographie. Svo. Zürich, 1868
Reyer (Eduard): Beitrag zur Physik der Eruptionen und der Eruptiv-Gesteine. Svo. Wien, 1877
Reynard (Francis): Geometria legitima, or an elementary system of theoretical geometry.  Svo. London, 1813
Rheinwald (Karl Christian), P. A. Offterdinger et J. H. Doerner:
De influxu Lunæ in partes Terræ mobiles. [Inaugural-Dissertation.] 4to. Tubingæ, 1769
Rhode (J. G.):  Versuch über das Alter des Thierkreises und den Ursprung der Sternbilder.  4to. Breslau, 1809
Ricca (Vincenzo Saporito):  La corona solare e l'ecclisse del 22 Dicembre 1870.  4to. Palermo, 1871
Riccioli (Giovanni Battista):  — : Almagestum novum, astronomiam veterem novamque complectens, observationibus aliorum et propriis, novisque theorematibus problematibus ac tabulis promotam.  — Tomus 1 in 2 vols. fol. Bononiæ, 1653 (1651)  — : Geographiæ et hydrographiæ reformatæ libri duodecim.  — fol. Bononiæ, 1661  — : Astronomiæ reformatæ tomi duo, quorum prior observationes, hypotheses, et fundamenta tabularum, posterior præcepta pro usu tabularum astronomicarum, et ipsas tabulas astronomicas cII continet. [Accedit catalogus fixarum.]  2 vols. in 1, fol. Bononiæ, 1665  — : Argomento fisico mattematico contra il moto diumo
della terra, confirmato con l'occasione della risposta alle considerazioni sopra la forza dell'detto argomento fatte da S. de gli Angeli. 4to. Bologna, 1668

----: \*Osservazioni astrofisiche della grande Cometa del 1882, eseguite nel Regio Osservatorio di Palermo. 4to. Roma, 1883

Richards (T.):
New South Wales in 1881, being a brief statistical and de-
scriptive account of the colony up to the end of the year.
8vo. Sydney, 1882
Riddle (Edward):
—: Observations on the present state of nautical astronomy.
8vo. London, 1821
—: *Observations on the practical inutility of Messrs. Yarrow
and Lynn's new methods of finding the longitude.
8vo. London, 1826
-: *A description of Barclay's Hydrostatic Quadrant, and an
account of observations made with it. 8vo. London, 1826
- : A treatise on navigation and nautical astronomy
with an extensive series of examples for exercise, and all
the tables requisite in nautical computations.
8vo. London, 1824
—: Ditto. Second edition. 8vo. London, 1831
—: Ditto. Third edition. 8vo. London, 1836
—: Ditto. Sixth edition. 8vo. London, 1855
—: Ditto. Seventh edition. 2 vols. 8vo. London, 1859
—: Ditto. Eighth edition, revised by A. Escott.
2 vols. 8vo. London, 1864
Riel (Karl):
Die Sternenwelt in ihrer geschichtlichen Entfaltung
Erste Abtheilung, der Fixsternhimmel. 8vo. Leipzig, 1866
Rigaud (J.):
Stephen Peter Rigaud A Memoir. 8vo. Oxford, 1883
Rigaud (Stephen Peter):
: Some account of Halley's Astronomiæ cometicæ synopsis,
which contains his investigation of the orbits of comets.
8vo. Oxford, 1835
: On the arenarius of Archimedes. 8vo. Oxford, 1837
-: Historical essay on the first publication of Sir Isaac New-
ton's Principia. 8vo. Oxford, 1838
[]: Mean heights of the barometer and thermometer, with the
fall of rain at the observatory, Oxford, during each month
of the years 1828 to 1836. 8vo.
: See also Bradley's miscellaneous works; Macclesfield collec-
tion.
Rignano (Duca di):

\*De' passaggi di Mercurio sul disco solare ed in ispecie di quello del 1832 osservato in Roma nella Specola Massima.

8vo. Roma, 1835

Riha (J.):

\*Bericht (3.) der zur Beobachtung der totalen Sonnenfinsterniss des Jahres 1868 nach Aden unternommenen österreichischen Expedition. 8vo. Wien, 1868

Ringelberg (Joachim):

Institutiones Astronomicæ ternis libris contentæ.

8vo. Venetijs, 1535

Ringwood (Alexander):

Means by which the height of clouds can be obtained by one observer. 12mo. Adelaide, 1877 Rinonapoli (Michele): \*Errori delle tavole lunari, dedotti dalle osservazioni dell' ecclisse solare del 28 Luglio 1851. 4to. Napoli, 1852 Rio de Janeiro, Observatoire Impérial: ---: Bulletin Astronomique et Météorologique, 1881-83. 4to. Rio de Janeiro, 1881-83 -: Annales . . . . Extrait du 1er volume (Passage de Mercure, &c.). Tome 1. Description de l'Observatoire. 4to. Rio de Janeiro, 1881-82 ---: See also Cruls (L.). Ritchie (Frederick J.): \*Description of the clock-trigger for the time-gun signal in Svo. Edinburgh, 1861 Edinburgh Castle. Ritgen (Ferd. Aug. Maria Fr. von): Betrachtung der Kometen als Sterne in früher Gestaltungs-Svo. Giessen, 1860 Ritter (Elie): \*Nouvelle méthode pour déterminer les éléments de l'orbite des astres qui circulent autour du soleil. 4to. Genève, 1855 Rivard (Dominique François): — : Trigonométrie rectiligne et sphérique, avec la construction des tables des sinus, des tangentes, des sécantes et des logarithmes. Troisième édition. 8vo. Paris, 1750 —: Traité de la sphère et du calendrier. Septième édition, revue et augmentée par Puissant. 8vo. Paris, 1816 Robert (Henri): Les mouvements des corps célestes et les principaux phénomènes qui en résultent démontrés à l'aide des appareils cosmographiques . . . . Deuxième édition. 8vo. Paris, 1852 Roberts (Edward): Tide-tables for the port of Hong Kong for the year 1883. 8vo. London. Roberts (Edward), A. W. Baird (& M. W. Rogers): Tide-tables for the Indian ports for the years 1881-83. 8vo. London. Robertson (Abram): — : Sectionum Conicarum libri septem; accedit tractatus de sectionibus conicis, et de scriptoribus qui carum doctrinam tradiderunt. 4to. Oxonii, 1792 — : A geometrical treatise of Conic Sections : . . . to which is added a treatise on the primary properties of conchoids, the cissoid, the quadratrix, cycloids, the logarithmic curve, and the logarithmic, Archimedean and hyperbolic spirals. 8vo. Oxford, 1802

— : Elements of Conic Sections deduced from the Cone, and designed as an introduction to the Newtonian philosophy.

8vo. Oxford, 1818

Engineering Notes. 8vo. London, 1873
Robertson (John):
<ul> <li>A treatise of such mathematical instruments as are usually put into a portable case with a short account of the authors who have treated on the proportional compasses and sector. Second edition. 8vo. London, 1757</li> <li>The elements of navigation; containing the theory and practice; with all the necessary tables. To which is added a treatise of marine fortifications Second edition 2 vols. in 1, 8vo. London, 1762</li> </ul>
Robins (Benjamin):
: A discourse concerning the nature and certainty of Sin Isaac Newton's method of fluxions, and of prime and ultimate ratios.  Svo. London, 1735  Nathematical tracts In two volumes. Vol. I. new
: Mathematical tracts In two volumes. Vol. 1, new principles of gunnery; Vol. 2, discourse on the methods of
fluxions, and of prime and ultimate ratios.
2 vols. 8vo. London, 1761
Robins (Benjamin), Philalethes Cantabrigiensis and H Pemberton:
[A discussion relating to Sir Isaac Newton's method of fluxions, in a series of articles from 'The present state of the Republic of letters' for 1735-37.] Svo. London, 1735-37
Robinson (Christopher):
A view of Sir Isaac Newton's method for comparing the resistance of solids.  Svo. London, 1734
Robinson (Thomas Romney):
: *On the longitude of the Armagh Observatory, given by fifteen chronometers of Arnold and Dent, &c.
4to. Dublin, 1839 : *On the difference of longitude between the Observatories of Armagh and Dublin, determined by rocket signals.  4to. Dublin, 1840
—: *An account of the Earl of Rosse's great telescope [2 papers].  8vo. Dublin, 1847-50
: *Description of an improved anemometer for registering the direction of the wind, and the space which it traverses
in given intervals of time. 4to. Dublin, 1851 : *On the probable errors of the eye and ear in transit observations. 8vo. Dublin, 1853
: *The speculum. [Article from 'Nichol's Physical Sciences.'  8vo. Glasgow.
: Observations and Catalogues of stars, see Armagh Observa-
Robinson (Thomas Romney) and Thomas Grubb:
*Description of the great Melbourne telescope.
Robison (John):

— : Elements of mechanical philosophy. Vol. 1, including dynamics and astronomy. 8vo. Edinburgh, 1804

Robison (John)—continued.

—: Ditto. With notes by David Brewster.
Roblin (Justin):  4 vols. Svo. Edinburgh, 1822
Explication du zodiaque de Denderah, des pyramides et de la Genèse. 8vo. Caen, 1861
Robson (Thomas Charles): A treatise on marine surveying.  8vo. Edinburgh, 1834
Roche (Edouard):  —: *Note sur la variation de la pesanteur à l'intérieur de la terre.  4to. Montpellier, 1855  —: *Réflexions sur la théorie des phénomènes cométaires à propos de la comète de Donati.  8vo. Paris, 1860  —: *Nouvelles recherches sur la figure des atmosphères des corps célestes.  4to. Paris, 1862  —: Recherches sur les offuscations du soleil et les météores cosmiques.  4to. Paris, 1868  —: See also Paris, Observatoire.
Rodwell (George Farrer):  A dictionary of science, comprising astronomy, chemistry, dynamics, electricity, heat, hydrodynamics, hydrostatics, light, magnetism, mechanics, meteorology, pneumatics, sound, and statics. Preceded by an essay on the history of the physical sciences.  8vo. London, 1871
Roger (Émile): Recherches sur le système du monde.  4to. Paris, 1862
Rogers (William A.):  —: *The determination of geographical latitude from observations in the prime vertical.  Svo. New Haven, 1869  :: *On the variability of personal equation in transit observations.  Svo. New Haven, 1869  :: *Catalogue of 618 stars observed at the astronomical observatory of Harvard College 1871-75.
to. Cambridge, 1880: *On the present state of the question of standards of length.
**On a method of determining the index error of a meridian circle, at any instant, depending upon the observed polar distance of *Polaris. Svo. Boston, 1883
Rohault (Jacques): Physica, Latinè vertit, recensuit, & adnotationibus amplicavit & ornavit Samuel Clarke. Editio quarta. 8vo. Londini, 1718
Roias (Joannes de):
Commentariorum in Astrolabium quod Planisphærium uocant, libri sex, nunc primùm in lucem editi. 4to. Lutetiæ, 1550

Rolleston (Frances):
—: Mazzaroth, or the constellations. Part 1-4. 8vo. London, 1862-65
: The testimony of the stars to truths revealed in the Bible.  Abridged from 'Mazzaroth, or the constellations,' by Caroline Dent. 8vo. London, 1879
Rollwyn (J. A. S.):
: Astronomy simplified for general reading, with numerous new explanations and discoveries in Spectrum Analysis, &c. &c. &c. Svo. London [1870]: Comets, and the New Comet of 1874; with a complete popular account of all that is known of these wonderful bodies, which are so great a perplexity to science.  Svo. London, 1874
Romano (Antonio):
Esposizione di quattro nuove scoperte: il moto perpetuo o continuato per quattro leggi e per due sistemi diversi. 8vo. Como, 1870
Rome, Accademia de' Lincei:
Memorie istorico-critiche raccolte e scritte da D. Baldassare Odescalchi. 4to. Roma, 1806
Rome, Accademia Pontificia de' Nuovi Lincei:
<ul> <li>: Atti.Anno 25-34 (1871-81).Tomo 25-34. 4to.Roma,1872-81</li> <li>: Triplice omaggio alla santità di Papa Pio IX. nel suo giubileo episcopale, offerto dalle tre Romane Accademie (Scienze: Accad. Pontif. de' Nuovi Lincei). 4to. Roma, 1877</li> </ul>
Rome, Reale Accademia dei Lincei:
: Atti. Tomo 25, sessione 4-6; Tomo 26, sessione 3, 4.
4to. Roma, 1872-74
— : Atti, Serie 2. 1873-76. Vol. 1-3. 4to. Roma, 1875-76 — : Atti, Serie 3 : Memorie della classe di scienze fisiche, mate-
matiche e naturali. Vol. 1–13. 4to. Roma, 1877–82
General Index in 10th vol.
: Atti, Serie 3: Transunti. Vol. 1-8. 1876-84. 4to. Roma, 1877-84
Rome, Osservatorio del Collegio Romano:
: Effemeridi della cometa d' Halley, calcolate secondo i diversi elementi dei Signori Damoiseau e Pontécoulant.
4to. Roma, 1835
: Nuova cometa di breve periodo di cui si attende
probabilmente il ritorno verso la fine del presente anno 1836
4to. Roma, 1836 ——: Memoria intorno ad alcune osservazioni fatte alla Specola
del Collegio Romano nel corrente anno, 1838. 4to. Roma.
: Memoria intorno a parecchie osservazioni fatte nella Specola
dell' Università Gregoriana in Collegio Romano dagli
astronomi della Compagnia di Gesù, 1839. 4to. Roma, 1840 ——: Annali dell' Osservatorio astronomico diretto dai Padri
della Compagnia di Gesù, Vol. 1. (Osservazioni meteorolo-
giche 1782–1842; Memoria intorno a parecchie osservazioni
fatte 1842.) 4to. Roma, 1840

Rome, Osservatorio del Collegio Romano—continued.
: Osservazioni fatte nella Specola nell' Università Gregoriana
in Collegio Romano, diretto dai P.P. della Compagnia di
Gesù. Anno 1843. 4to. Roma
—: Memorie dell' osservatorio 1850-51.
2 vols. 4to. Roma, 1851-52
-: Memorie 1852-55. Descrizione del nuovo Osservatorio:
Memoria sui lavori eseguiti dal 1852 a tutto Aprile
1856 del P. Angelo Secchi. 4to. Roma, 1856 ——: Memorie del Nuovo Osservatorio dall' Aprile 1856
al Settembre 1857 pubblicate dal P. A. Secchi.
4to. Roma, 1857
— : Memorie Nuova Serie pubblicate dal P. A.
Secchi, 1857-63. Vol. 1, 2. 4to. Roma, 1859-63  ——: Catalogo di 1321 [1221] stelle doppie misurate col grande
equatoreale di Merz dal P. A. Secchi.
equatoreale di Merz dai 1 . A, secchi. 4to. Roma, 1860
: *Serie seconda delle misure micrometriche fatte
1863-66 dal P. A. Secchi. 4to. Roma, 1868
: *Terza serie delle misure micrometriche delle stelle doppie,
fatte, 1872–74, dal P. G. Stanislao Ferrari.
4to. Roma, 1875
: Osservazioni magnetiche e meteorologiche, 1862-71.
4to. Roma ——: Bullettino Meteorologico con Corrispondenza e
Bibliografia per l' avanzamento della fisica terrestre, com-
pilato dal P. Angelo Secchi. Vol. 1-17. 4to. Roma, 1862-78
: Pontificia Università Gregoriana : continuazione del Bullet-
tino Meteorologico dell' Osservatorio del Collegio Romano
[Edited by G. S. Ferrari]. Vol. 18-21. 4to. Roma, 1879 82
— : Stelle del Catalogo di Baily dal polo boreale fino a 30° di decl. australe, contrassegnate secondo i loro diversi colori.
[12 maps.] Fasc. 1. obl. fol. n.d.
Rome, Società degli Spettroscopisti Italiani:
Memorie Ruccolte e pubblicate per cura del Prof P
Memorie. Raccolte e pubblicate per cura del Prof. P. Tacchini. Vol. 1-12. 4to. Palermo e Roma, 1872-83
Rome, Ufficio Centrale di Meteorologia Italiana:
Annali, Serie 2. Vol. 1, 3. 1879-81. 4to. Roma, 1880-83
Ronayne (Philip):
A treatise of algebra, in two books Second edition.
8vo. London, 1727
Rosa (Paolo):
Studii intorno ai diametri solari. 4to. Roma, 1873
Rosa (Philipp Georg):
Dissertatio chimico-medica de theriaca coelesti. [Inaugural- Dissertation.] 4to. Jene, 1703
Roscoe (Henry E.):
-: Lessons in elementary chemistry. 12mo. London, 1866
: Spectrum analysis. Six lectures, delivered in 1868, before
the Society of Apothecaries of London. Second edition.
8vo. London, 1870

310 Rosen (P. G.): \*Studien und Messungen an einem Zöllner'schen Astro-Photo-8vo. St. Petersburg, 1869 Rosencreutzer (Marcus Friederich): Astronomia Inferior, oder septem planetarum terrestrium spagyrica recensio: das ist Erzehlung und Erwehlung der sieben irdischen Planeten . . . . 8vo. Nürnberg, 1674 Rösler (Gottlieb Friedrich): Handbuch der praktischen Astronomie für Anfänger und 2 vols. 8vo. Tübingen, 1788 Liebhaber. Ross (John): ---: A voyage of discovery . . . in His Majesty's ships Isabella and Alexander, for the purpose of exploring Baffin's Bay, and inquiring into the probability of a North-West passage. 4to. London, 1819 -: Narrative of a second voyage in search of a North-West passage, and of a residence in the Arctic regions, during the years 1829-33; . . . including the reports of James Clark Ross, and the discovery of the Northern Magnetic 4to. London, 1835 Pole. [With Appendix.] - : A short treatise on the deviation of the mariner's compass. 8vo. London, 1849 - : Description and use of the royal Clarence Sextant. 4to. n.d. Rosse (Alexander): The new planet no planet; or the earth no wandring star, except in the wandring heads of Galileans; here the earth's immobility is asserted, and Copernicus his opinion, as erroneous, ridiculous, and impious, fully refuted. 4to. London, 1646 Rosse (Earl of): ---: \*Preliminary note on some measurements of polarization of the light coming from the Moon and from the planet 8vo. Dublin, 1877 -: \*On some recent improvements made in the mountings of 4to. London, 1880 the telescopes at Birr Castle. ---: \*Observations of nebulæ and clusters of stars made with the six-foot and three-foot reflectors at Birr Castle, from the year 1848 up to the year 1878. . . . Part 1-3. 4to, Dublin, 1880 Rossel (É. P. É. de):

-: A practical treatise on finding the latitude and longitude at sea; with tables designed to facilitate the calculations. Translated from the French by Thomas Myers . . . . to which are subjoined an extensive series of practical examples, an introduction to the tables, and some additional tables, by 8vo. London, 1815 the translator. -: Traité des calculs de l'astronomie nautique, avec des Tables destinées à en faciliter l'usage. 8vo. Paris, n.d.

- : See also Bézout, Traité de navigation ; Biot (J. B.), Traité d'astronomie physique.

— : Atlas portatilis coelestis, oder compendiöse Vorstellung des gantzen Welt-Gebäudes, in den Anfangs-Gründen der

Soluzione esatta e regolare del difficilissimo problema della

Svo. Londra, 1804

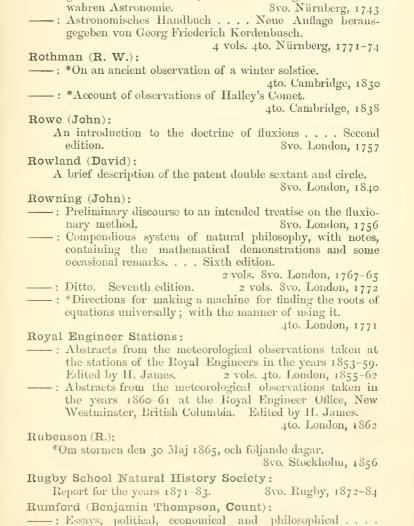
4to. Nürnberg, 1727

Rossi (Gaetano):

quadratura del circolo.

Rost (Johann Leonhard):

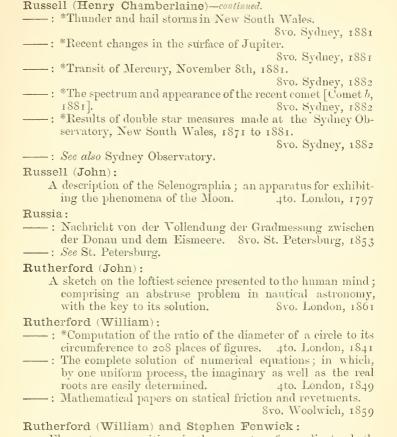
——: Der aufrichtige Astronomus,



fourth edition. Vol. 1-3. 8vo. London, 1798-1802

: Complete works . . . . Published by the American Academy of Arts and Sciences. 4 vols. 8vo. Boston, 1870-75

Rumford (Benjamin Thompson, Count)—continued.
: Memoir with notices of his daughter. By G. E.
Ellis. 8vo. Philadelphia [1873]
Rümker (Carl Ludwig):
: Preliminary catalogue of fixed stars intended for a pro-
spectus of a catalogue of the stars of the Southern hemi-
sphere from the observations made in the Observa- tory at Paramatta. 4to. Hamburgh, 1832
-: Ueber die Oerter sphärischer Dreiecke. 4to. Hamburg, 1834
: Mittlere Oerter von 12,000 Fix-Sternen, für den Anfang
von 1836, abgeleitet aus den Beobachtungen auf der Ham-
burger Sternwarte. oblong fol. Hamburg, 1843
— : Handbuch der Schifffahrts-Kunde, mit einer Sammlung von Seemanns-Tafeln Vierte Auflage.
8vo. Hamburg, 1844
— : Ditto. Fünfte Auflage. 8vo. Hamburg, 1850
: Ditto. Sechste Auflage. 8vo. Hamburg, 1857
-: Längen-Bestimmung durch den Mond: eine nautisch-
astronomische Abhandlung. 8vo. Hamburg, 1849  —: See also Hamburg, Sternwarte.
<u> </u>
Rümker (Georg):  Die totale Sonnenfinsterniss am 18. Juli 1860, beobachtet zu
Castellon de la Plana. 4to. Hamburg, 1861
Runkle (John D.):  *New tables for determining the values of the coefficients
in the perturbative function of planetary motion, which
depend upon the ratio of the mean distances. [With] As-
teroid supplement. 4to. Washington, 1855
Rush (George):
Account of ascents in the Nassau and Victoria balloons,
1838, 1849 & 1850 and an appendix by W. H. Jones, consisting of tables for the measurement of heights
by the barometer.  Svo. London, 1851
Russell (Henry Chamberlaine):
: *Observations on the stars and nebula about η Argûs. 8vo. Sydney, 1871
: Climate of New South Wales: descriptive, historical, and
tabular. 8vo. Sydney, 1877
: *Storms on the coast of New South Wales.
8vo. Sydney, 1878
: *Papers read before the astronomical section of the Royal Society of New South Wales, 1878-79.
8vo. Sydney, 1879–80
: *The Wentworth hurricane. 8vo. Sydney, 1880
: *Some new double stars and southern binaries.
8vo. Sydney, 1880 : *The 'Gem' cluster in Argo. 8vo. Sydney, 1880
-: *Note upon a sliding-scale for correcting barometer readings
to 32° Fah. and mean sea level. 8vo. Sydney, 1880



Elementary propositions in the geometry of co-ordinates, both of two and three dimensions. 4to. London, 1843

# Rutherford (W.), S. Fenwick, and T. S. Davies:

An elementary course of mathematics, prepared for the Royal Military Academy, by order of the Master-General and Board of Ordnance . . . . 2 vols. Svo. London, 1853

### Rutherforth (T.):

A system of natural philosophy, being a course of lectures in mechanics, optics, hydrostatics, and astronomy.

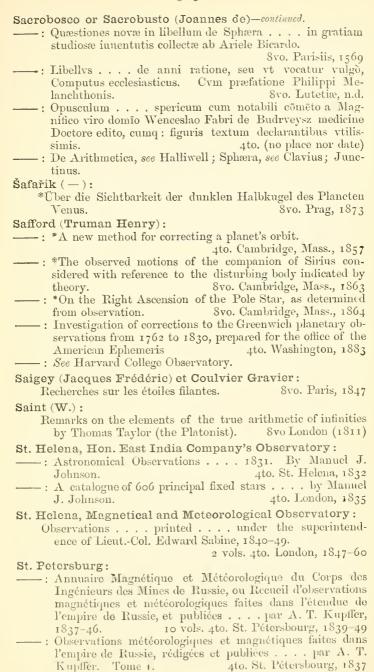
2 vols. 4to. Cambridge, 1748

### Ryan (Matthew):

The celebrated theory of parallels: demonstration of the celebrated theorem, Euclid I, Axiom 12; with appendix, containing the philosophy of the demonstration, together with the partial refutation of Sir William Hamilton's Philosophy of the Unconditioned or Infinite.

8vo. Washington, 1866

Sabine (Edward):
: *Report on the variations of the magnetic intensity observed at different points of the earth's surface.  Svo. London, 1838
: *Report on the magnetic isoclinal and isodynamic lines in
: Magnetic observations. 8vo. n.d.
: See Colonial Magnetic Observatories, Cape of Good Hope, Hobarton, St. Helena, Toronto.
Sabler (G.):
Beschreibung der zur Ermittelung des Höhenunterschiedes zwischen dem Schwarzen und dem Caspischen Meere
in den Jahren 1836 und 1837 von G. Fuss, A. Sawitsch und G. Sabler ausgeführten Messungen
zusammengestellt von G. Sabler. Herausg. von W. Struve. 4to. St. Petersburg, 1849
Sacrobosco or Sacrobusto (Joannes de):
: Sphericū opusculū. Cōtraq: cremonēsia ī planetarum theoricas delyramēta Joānis de mōte regio disputationes tā
acuratiss. q: vtiliss. Necnō georgij purbachij ī eorūdē mot' planetarum acuratiss. theorice
4to. [Venetiis] E. Ratdolt, 1482 ——: Sphaera Mvndi. (Sphæricū opusculū una cū additiōibus
nōnullis Cōtraq: cremonēsia ī planetarum theoricas
delyramenta Ioānis de mōteregio disputaōes ttā acuratis. q' utilis. Nec nō Georgii purbachii ī eorūdē motus planetarum
accuratis. theoricae) 4to. Venetiis, 1490
— : Opusculum Johannis de sacrobusto spericū, cum notabili commento atq: figuris, textum declarantibus vtilissimis
(per Wenceslaum Fabri de Budweysz correctum).
4to. Lipczk, 1499 ——: Sphæra Iani de Sacrobysto astronomiae ac cosmographiae
candidatis scitu apprime necessaria, per Petrum Apianum
accuratissima diligentia denuo recognita ac emendata. 8vo. Ingolstadii, 1526
: Spherae tractatus Joannis de Sacro Bysto; Gerardi Cremo-
nensis theoricae planetarym veteres; Georgii Pyrbachii theoricae planetarym novae Joannis Baptistæ ca-
puani sipontini expositio in sphæra & theoricis [&c.]
fol. Venetiis, 1531 ——: Libellys de sphera. Accessit eivsdem avtoris compytys
ecclesiasticus cum præfatione Philippi Melanthonis.
(Access. Themata que continent methodicam Tractationem de horizonte rationali ac sensibili [&c.], auctore Erasmo
Reinholdo.) 8vo. Vitebergæ, 1545
: Ditto. 8vo. Vitebergæ, 1558-78 : Sphæra emendata. Eliæ Vineti Santonis scholia in
eandem Sphæram, ab ipso auctore restituta. Adjunximus
huic libro compendium in Sphæram per P. Valerianum et Petri Nonii demonstrationem.
8vo. Parisiis, 1569



St. Petersburg—continued.
— : Recueil d'observations magnétiques faites à St. Péters-
bourg et sur d'autres points de l'empire de Russie, par
A. T. Kupffer et ses collaborateurs.
4to. St. Pétersbourg, 1837
: Travaux de la Commission pour fixer les mesures et les
poids de l'empire de Russie. Rédigés par A. T. Kupffer.
2 vols. 4to. St. Pétersbourg, 1841
St. Petersburg, Académie Impériale des Sciences:
— : Commentarii Academiae Scientiarum Imperialis Petropoli-
tanae 1726-46. Tom. 1-14. 4to. Petropoli, 1728-51
: Novi Commentarii Academiae Scientiarum Imperialis Pe-
tropolitanae. 1747-75. Tom. 1-20. 4to. Petropoli, 1750-76
— : Acta Academiae Scientiarum Imperialis Petropolitanae. 1777–82. 12 vols. 4to. Petropoli, 1778–86
1777–82. 12 vols. 4to. Petropoli, 1778–86  —: Nova Acta Academiae Scientiarum Imperialis Petropoli-
tanae. 1783–90. Tom. 1–8. 4to. Petropoli, 1787–94
-: Mémoires, Tome 10, avec l'Histoire de l'Académie pour les
années 1821–22. 4to. St. Pétersbourg, 1826
: Recueil des Actes de la séance solennelle de l'Académie
tenue à l'occasion de sa fête séculaire 1826.
4to. St. Pétersbourg, 1827
— : Recueil des Actes des séances publiques 1827-48.
4to. St. Pétersbourg, 1828–49
— : Mémoires présentés par divers savants et lus dans
ses assemblées. Tome 1–9. 4to. St. Pétersbourg, 1831–59
: Mémoires 6 <sup>me</sup> Série, sciences mathématiques,
physiques et naturelles. Tome 1, 2.
4to. St. Pétersbourg, 1831-33
— : Mémoires sixième série, sciences mathématiques, physiques et naturelles, Tome 3-9. Première partie, sciences
mathématiques et physiques, Tome 1-7.
4to. St. Pétersbourg, 1838–59
- : Mémoires, Série 7. Ouvrages astronomiques et géodésiques
publiés dans la série. Tome 1, No. 1—Tome 31, No. 15.
to St Dotomobourg ISEO St
: Compte Rendu, 1852-57. 8vo. St. Pétersbourg, 1853-58
: Recueil des Mémoires présentés par les astronomes
de Poulkova, ou offerts à l'Observatoire Central par d'autres
astronomes du pays. Publié par W. Struve et O. Struve.
Vol. 1, 2. 4to. St. Pétersbourg, 1853-59
: Mélanges mathématiques et astronomiques tirés du Bulle-
tin. Tome 1–6. [The Astronomical Papers only]. 8vo. St. Pétersbourg, 1859–83
: Bulletin. Tome 1–28. 4to. St. Pétersbourg, 1860–83
- : Tableau général méthodique et alphabétique des matières
contenues dans les publications de l'Académie Ire
partie. Publications en langues étrangères.
8vo. St. Pétersbourg, 1872
Salentin (L. M.):
Diamètre du tourbillon du soleil déterminé par les incli-
naisons des orbites de ses planètes. 8vo. Paris, 1857

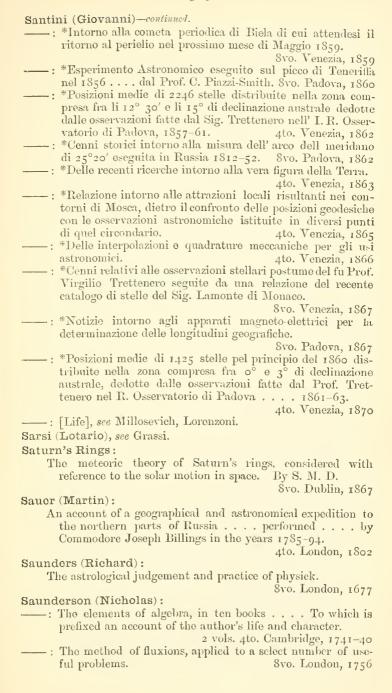
Salusbury (Thomas): Mathematical collections and translations . . . . containing Galileus Galileus, his system of the world [&c.] 2 vols. in 1, fol. London, 1661 Sandeman (Patrick): Meteorological observations, chiefly intended to explain the origin of the rainy seasons near the Equator, and changes of the seasons and courses of the winds in more northerly latitudes. 8vo. Greenock, n.d. San Fernando, Observatorio Real de Marina: - : Almanaque náutico y Efemérides astronómicas para el año de 1830-32, 1834-50, 1855-64, 1867-85. 8vo. Madrid, 1827-83 ---: Observaciones hechas en el Observatorio Real . . . . 3 vols. in 1, fol. San Fernando, 1835-36 ----: Anales del (Instituto y) Observatorio . . . . publicados de orden de la superioridad por el Director C. Pujazon. Seccion 2. Observaciones meteorólogicas, 1870-82. fol. San Fernando, 1870-83 - : Anales . . . . Seccion 1. Observaciones astronómicas: eclipse de Sol de 22 de Diciembre de 1870. fol. San Fernando, 1871 - : Formulas nuevas para calcular la aberración de los planetas (y de los cometas) . . . . por Don Josef Sanchez Cerquero. Svo. Sang (Edward): ---: \*Nouveau calcul des mouvements elliptiques. 4to. Turin, 1870 ---: On the comet's [Comet b, 1881] close approach to the star B.A.C. 1881 (Camelopardus H 21). Svo. Edinburgh, 1881 ---: See Shortrede (R.), Traverse tables. Santiago de Chile: \*A catalogue of 1963 stars, reduced to the beginning of the year 1850, together with a catalogue of 290 double stars. The whole from observations made . . . . 1850-52 by the U.S. Naval Astronomical Expedition . . . . James M. Gilliss, superintendent. 4to. Washington, 1870 Santiago de Chile, Observatorio Nacional: \_\_\_\_\_: Observaciones astronómicas hechas . . . . en los años de 1853-60, por C. G. Moesta. Tomo 1, 2. 4to. Santiago de Chile, 1859-75 - : Observaciones meridianas i micrométricas relativas al planeta Marte al tiempo de su oposicion en 1862. fol. Santiago, 1863 ---: Observaciones meteorológicas verificadas en el Observatorio Astronómico de Santiago (i en Valparaíso) en los años 1868-64, por C. G. Moesta. Svo. Santiago de Chile, 1863-65 Santini (Giovanni):

----: \*Teoria del nuovo pianeta Vesta, ricavata dalle opposizioni

4to. Verona, 1816

degli anni 1808 14.

Santini (Giovanni)-continued.
: Elementi di Astronomia, con le applicazioni alla geografia
nautica, gnomonica, e cronologia.
2 vols. 4to. Padova, 1819–20
: Ditto. Edizione secunda. 2 vols. 4to. Padova. 1830
: *Osservazioni intorno all' ecclisse solare del giorno 7 Set-
. Ossorvazioni intorno an eccusso solate da giorno / per-
tembre dell' anno 1820. 4to. Modena, 1824
: *Osservazioni intorno alla cometa apparsa agli ultimi di
Dicembre dell' anno 1823, fatte nell' Regio Osservatorio di
Padova. 4to. Padova, 1825
: Teorica degli stromenti ottici destinati ad estendere con-
fini della visione naturale. 2 vols. 8vo. Padova, 1828
: *Ritorno della cometa periodica di Biela al suo perielio
nell' anno 1832. 4to. Padova, 1833
: *Calcolo delle variazioni prodotte negli elementi ellittici della
Carcolo dollo variazioni prodotto negli elementi elittilei della
cometa detta di Biela dall' azione di Giove, di Saturno e
della Terra 1832–39. 4to. Padova, 1835
-: *Ricerche intorno alla massa di Giove determinata me-
diante le digressioni del suo quarto satellite.
4to. Modena, 1836
400. Intollena, 1030
: *Opuscoli astronomici intorno alle comete osservate
dall' anno 1830 fino all' anno 1835. 4to. Padova, 1836
-: *Descrizione del circolo meridiano dell' I. R. Osservatorio
di Padova, seguita da un Catalogo di stelle fisse per l'anno
1840. 4to. Padova, 1840
: *Posizioni medie delle stelle fisse ridotte al principio dell'
anno 1840. 4to. Padova, 1840
-: *Considerazioni intorno al calcolo degli oculari per i cann-
occhiali astronomici. 4to. Venezia, 1842
-: *Osservazioni intorno alle comete apparse nell' anno 1843
College IV I D. Occarretorie di Dederre de Madana de
fatte nell' I. R. Osservatorio di Padova. 4to. Modena, 1844
: *Calcolo delle perturbazioni della cometa di breve periodo appellata di Biela 1846-52. 4to. Venezia, 1851
periodo appellata di Biela 1846–52. 4to. Venezia, 1851
-: *Sul progresso degli Studii Astronomici negli ultimi tempi.
8vo. Venezia, 1853
avo. venezia, 1053
: *Descrizione di un oculare composto da cinque lenti pe'
cannocchiali della terza specie, appellati terrestri.
8vo. Padova, 1855
-: *Annotazioni intorno alla cometa periodica di Biela, ed alla
III Cometa del 1854. 8vo. Venezia, 1855
-: *Dei diversi metodi per determinare le longitudini geo-
: *Dei diversi metodi per determinare le longitudini geo-
grafiche 8vo. Padova [1855]
: *Osservazioni della ecclisse solare del giorno 28 Luglio
1851 fatte in diversi osservatorii di Europa, calcolate per
GS 4to. Venezia, 1856
40. Venezia, 1050
: *Intorno ai micrometri formati nell campo oscuro di un cann-
occhiale con linee chiare e punti luminosi dietro i pro-
getti proposti dal Sig. Simone Stampfer. 8vo. Venezia, 1857
-: *Posizioni medie di 2706 stelle pel 1 Gennajo 1860 distri-
buite nella zona compresa fra 10° e 12° 30′ di declinazione
buttle field zona compresa ita 10 e 12 30 di decimazione
australe, dedotte dalle osservazioni fatte negli anni 1856–58
nell' I. R. Osservatorio di Padova. 4to. Venezia, 1858



Saussure (Horace Bénédict de): Essais sur l'Hygrométrie. 4to. Neuchatel, 1783
Sayérien (Alexandre):
—: Dictionnaire universel de mathématique et de physique, où l'on traite de l'origine, du progrès de ces deux sciences & les arts qui en dépendent, & les diverses révolutions qui leur sont arrivées jusqu'à notre tems. 2 vols. 4to. Paris, 1753—: Histoire des Philosophes modernes. Seconde édition.  8 vols. 12mo. Paris, 1762-73
Savile (Henry):  Prælectiones tresdecim in principium elementorum Euclidis, Oxonii habitæ, MECXX.  4to. Oxonii, 1621
Sawitsch (Alexei):  ——: Abriss der practischen Astronomie, vorzüglich in ihrer Anwendung auf geographische Ortsbestimmung aus dem Russischen übersetzt von Dr. W. C. Goetze. 2 vols. in 1, 8vo. Hamburg, 1850-51
— : (Theory of Probabilities : in Russian).
8vó. St. Petersburg, 1857  — : Die Anwendung der Wahrscheinlichkeitstheorie auf die Berechnung der Beobachtungen und geodätischen Messungen, oder die Methode der kleinsten Quadrate Deutsch bearbeitet von C. G. Lais. 8vo. Mitau und Leipzig, 1863
Sawyer (Edwin F.):  *First catalogue of radiant points of meteors.
Sawyer (F. E.):  The climate of Brighton; being a summary of meteorological observations made in the town to the end of 1870, by S. Barker, E. Rowley, and F. E. Sawyer. 12mo. Brighton, 1871
Sayce (A. H.):  *The astronomy and astrology of the Babylonians, with translations of the tablets relating to these subjects.  8vo. London, 1874
Scaliger (Josephus Justus):  ——: Opvs novvm de emendatione temporvm in octo libros
tribvtvm. fol. Lvtetie, 1583 : Cyclometrica elementa duo. fol. Lugduni Batavorum, 1594 : In Mesolabium. fol. Lugduni Batavorum, 1594 : Opvs de emendatione temporvm: hac postrema editione addita vetervm Græcorvm fragmenta selecta.  2 parts in 1 vol. fol. Genevæ, 1629
: Cyclometrica elementa duo. fol. Lugduni Batavorum, 1594: In Mesolabium. fol. Lugduni Batavorum, 1594: Opvs de emendatione temporvm: hac postrema editione addita vetervm Græcorvm fragmenta selecta.  2 parts in 1 vol. fol. Genevæ, 1629 Scarpellini (Caterina):
: Cyclometrica elementa duo. fol. Lugduni Batavorum, 1594: In Mesolabium. fol. Lugduni Batavorum, 1594: Opvs de emendationetemporvm: hac postrema editione addita vetervm Græcorvm fragmenta selecta.  2 parts in 1 vol. fol. Genevæ, 1629 Scarpellini (Caterina):: *Ipotesi sulla fisica e meccanica celeste secondo il sistema fluidale-elettro-magnetico. 4to. Roma, 1859: *Il grande ecclisse solare del 18 Luglio 1860.
: Cyclometrica elementa duo. fol. Lugduni Batavorum, 1594: In Mesolabium. fol. Lugduni Batavorum, 1594: Opvs de emendatione temporvm: hac postrema editione addita vetervm Græcorvm fragmenta selecta.  2 parts in 1 vol. fol. Genevæ, 1629  Scarpellini (Caterina):: *Ipotesi sulla fisica e meccanica celeste secondo il sistema fluidale-elettro-magnetico. 4to. Roma, 1859

Scarpellini (Erasmo Fabri):

tironum.

: *Sopra alcuni nuovi riflettori lavorati in Roma per uso di
grandi telescopii. 4to. Roma, 1835 —: Ditto Seconda edizione, accresciuta di un appendice
per cura di Pietro Biolchini. Svo. Roma, 1838
: *Cenno necrologico dell' astronomo P. Giovanni Inghirami.
8vo. Roma.
-: *Memorie di Niccolò Cacciatore. Svo. Roma.
Schaeberle (J. M.):
*On the remarkable Aurora of September 12–13, 1881. Svo. New Haven, 1881
Schaub (Franz):
: *Beobachtungen der totalen Sonnenfinsterniss am 7. Juli
1842 in der österreichischen Monarchie und Turin.
4to. Wien, 1843 —: Magnetische Beobachtungen im östlichen Theile des Mittel-
meeres ausgeführt im Jahre 1857. 4to. Triest, 1858
: Leitfaden für den Unterricht in der nautischen Astro-
nomie in der kais, kön. Marine Zweite Auflage.
Scheibel (Johann Ephraim):
Einleitung zur mathematischen Bücherkenntniss. Stück 13-
16 (Astronomische chronologische Bibliographie, xv. und
xvi. Jahrhundert). 8vo. Breslau, 1784–86
Scheiner (Christoph):
: Rosa Vrsina, sive sol ex admirando facylarum & macularum suarum phænomeno varivs, necnon circa centrum
suum & axem fixum ab ortu in occasum conuer-
sione quasi menstrua, super polos proprios, libris quatuor
mobilis ostensus. fol. Bracciani, 1630 : Oculus; hoc est fundamentum opticum, in quo ex accurata
oculi anatome radius visualis eruitur; sua visioni
in oculo sedes decernitur; anguli visorii ingenium aperitur
[&e.] 4to. Londini, 1652
Schellen (Heinrich):
—: Die Spectralanalyse in ihrer Anwendung auf die Stoffe der
Erde und die Natur der Himmelsköper Zweite Auflage. 8vo. Braunschweig, 1871
: Ditto. Dritte Auflage.
2 vols. 8vo. Braunschweig, 1883
: Spectrum analysis in its application to terrestrial substances, and the physical constitution of the heavenly
bodies Translated by Jane and Caroline Las-
sell. Edited, with notes, by William Huggins.
Svo. London, 1872
Scherffer (Carl):  ——: Institutionum geometricarum pars prima (secunda, tertia
et quarta), sive geometria elementaris, conscripta in usum
tironum. 4 parts in 1 vol. 4to. Vindobonæ, 1770
: Institutiones astronomize theoreticae, conscriptae in usum

4to. Vindobonæ, 1777

Schiaparelli (Giovanni V.):
: *Notizie sulla vita e sugli scritti di Francesco Carlini.
8vo. Milano, 1863
: *Intorno al corso ed all'origine probabile delle stelle meteo-
riche. Lettere al P. A. Secchi. 4to. Roma, 1866
: *Note e riflessioni intorno alla teoria astronomica delle stelle
cadenti. 4to. Firenze, 1867
: *Sulla velocità delle meteore cosmiche nel loro movimento
a traverso dell' atmosfera terrestre. 8vo. Milano, 1868
: *Alcune principali radiazioni meteoriche dedotte dalle
osservazioni di stelle cadenti fatte a Bergamo dal sig. G.
Zezioli 1867–69.
: *Alcuni risultati preliminari tratti dalle osservazioni di
stelle cadenti pubblicate nelle Effemeridi degli anni 1868,
1869, 1870 [2 papers]. 8vo. Milano [1870]
— : Entwurf einer astronomischen Theorie der Sternschnuppen
Aus dem Italienischen übersetzt und herausgegeben
von Georg von Boguslawski. 8vo. Stettin, 1871
: *Il periodo undecennale delle variazioni diurne del magne-
tismo terrestre considerato in relazione colla frequenza
delle macchie solari. Risultati di 38 anni di osservazioni
fatte a Milano. 4to. Palermo, 1874
: *Sul calcolo di Laplace intorno alla probabilità delle orbite
cometarie iperboliche. Svo. Milano, 1874
: *Osservazioni astronomiche e fisiche sull' asse di rotazione e
sulla topografia del pianeta Marte fatte nella reale Specola di Brera in Milano coll' Equatoriale di Merz durante l' op-
posizione del 1877. 4to. Roma, 1878
: *Osservazioni astronomiche e fisiche sull'asse di rotazione e
sulla topografia del pianeta Marte fatte nella reale Specola
di Brera in Milano coll' Equatoriale di Merz. Memoria
seconda. 4to. Roma, 1881
: *Osservazioni sulla topografia del pianeta Marte fatte a
Milano coll' equatoriale di Merz durante l' opposizione 1881-
82. Communicazione preliminare. 4to. Roma, 1882
: *Misure di alcune principali Stelle doppie di rapido movi-
mento orbitale eseguite negli anni 1875–1882 col Refrattore
di Merz del R. Osservatorio di Brera in Milano.
4to. Milano, 1882
Schiaparelli (Giovanni V.) e Francesco Denza:
*Sulla grande pioggia di Stelle cadenti prodotta dalla cometa
periodica di Bielae osservata 27 Nov. 1872. 8vo. Milano, 1872
Schier (Carl H.):
Globus coelestis Arabicus, qui Dresdae in Regio Museo mathe-
matico asservatur. 4to. Lipsiæ, 1865
Schiller (Julius):
Cælum Stellatvm Christianum, ad maiorem Dei Omnipotentis, Sanctæque Eius Ecclesiæ Gloriam, obductis
Gentilium simulachris, Eidem Domino et Creatori suo,
postliminio quasi restitutum Sociali operâ J. Bayeri
Vranometriam nouam suppeditantis
obl. fol. Augustæ Vindelicorum, 1627

Schilling (Mag. O.) et Adolph P. Weller:

De meritis Tychonis Brahe in Astronomiam Mechanicam Dissertatio [Inauguralis]. 4to. Upsalie, 1792

Schimko (Johann Gottlieb):

Die Planetenbewohner, und ihre . . . . verschiedene geistige Vollkommenheit, mit besonderer Rücksicht auf des Menschen physischen und geistigen Zustand. 8vo. Olmütz, 1856

Schio (Almerico da):

Di due astrolabi in caratteri cufici occidentali trovati in Valdagno (Veneto). 4to. Venezia, 1880

Schjellerup (H. C. F. C.):

- : Stjernefortegnelse indeholdende 10,000 Positioner af teleskopiske Fixstjerner imellem — 15 og + 15 Graders Deklination. 4to. Kjöbenhavn, 1864
- ---: \*Genäherte Örter der Fixsterne. 4to. Leipzig, 1867
- ----: \*Bidrag til bedömmelsen af de moderne maaneelementers paalidelighed. 8vo. Kjöbenhavn, 1874
- ---: See Al Sufi, Description des étoiles fixes.

Schläfli (Ludwig):

- ——: Lösung einer Pendel-Aufgabe. (Zum Lections-Katalog der Berner Hochschule, 1867.) 4to. Bern, 1867
- : Einige Zweifel an der allgemeinen Darstellbarkeit einer willkürlichen periodischen Function einer reellen Variabeln durch eine trigonometrische Reihe. [Inaugural-Dissertation.]

  4to. Berne, 1874

Schlagintweit (Hermann von):

\*Optische Erscheinungen der Atmosphäre. 8vo. Leipzig [1850]

Schlegel (Gustave):

- ----: Uranographie Chinoise ou preuves directes que l'astronomie primitive est originaire de la Chine, et qu'elle a été empruntée par les anciens peuples occidentaux à la sphère chinoise.

  2 vols. 8vo. La Haye & Leyde, 1875
- ----: Atlas céleste chinois et grec d'après le Tien-Youen-Lí-Li. fol. La Haye & Leyde, 1875
- : \*Réponse aux critiques de l'Uranographie Chinoise. 8vo. La Haye, 1880

Schmalcalder (-):

A short explanation of the use and advantages of the patent repeating theodolite.

8vo. London, 1818

Schmerbauch (Gottlieb Heinrich):

Cogitationes rationales de systemate mundi. [Inaugural-Dissertation.] 4to. Vitebergae, 1737

Schmick (J. Heinrich):

- : Der Mond als glänzender Beleg für die kosmisch bewirkte säkulare Umlegung verschiebbarer Bestandtheile der Weltkörper. 8vo. Leipzig, 1876
- : Sonne und Mond als Bildner der Erdschale erwiesen durch ein klares Zeugniss der Natur. Einige Verwendungen dieses Ergebnisses.

  8vo. Leipzig, 1878

Schmidt (Johann Friedrich Julius):
: Beobachtung der totalen Sonnenfinsterniss vom 28sten
Juli 1851 zu Rastenburg in Ostpreussen. 4to. Bonn, 1852
: Das Relief der sichtbaren Halbkugel des Mondes, ange-
fertigt von Th. Dickert. 8vo. Bonn [1854]
: Das Zodiacallicht. Uebersicht der seitherigen Forschun-
gen nebst neuen Beobachtungen über diese Erscheinung
in den Jahren 1843 bis 1855. Svo. Braunschweig, 1856
: Der Mond. Ein Ueberblick über den gegenwärtigen
Umfang und Standpunkt unserer Kenntnisse von der
Oberflächengestaltung und Physik dieses Weltkörpers.
8vo. Leipzig, 1856
: Resultate aus elfjährigen Beobachtungen der Sonnenflecken.
4to. Wien und Olmütz, 1857
: *Ueber die Bewegung dunkler und heller Flecken auf
Jupiter, 410. Altona, 1865
: *Beobachtung der Meteore in der Nacht des 1314. Novem-
ber 1866. 8vo. Wien, 1866
: Über Rillen auf dem Monde. 4to. Leipzig, 1866
: *Über Feuermeteore 1842 bis 1867. 8vo. Wien, 1867
: Charte der Gebirge des Mondes, nach eigenen Beobachtun-
gen in den Jahren 1840–1874. 25 Blätter.
(fol. 4to.), Berlin, 1878
: Erläuterungsband. 4to. Berlin, 1878
: See also Athens Observatory; Lohrmann's Mondcharte.
Schmitz (J. W.):
- : De l'état stationnaire de la philosophie naturelle, ou indica-
tions des recherches à faire dans l'astronomie et la physique.
8vo. Paris et Bruxelles, 1837
—: Natur-Astronomie für jeden gesunden Menschenverstand.
8vo. Köln, 1857
Schomburg (Heinrich):
Geoscopiæ Selenitarum, h.e. discursus astronomici de figura,
magnitudine [&c.], telluris è lunâ spectatæ. Pars prima.
[Inaugural Dissertation.] 4to. Jenæ, 1654
[Inaugurar Dissertation.] 4to. Jene, 1054
Schoner (Johann):
Tabylæ astronomicæ, qvas uulgo, quia omni difficultate &
obscuritate carent, Resolvtas nocant. Ex quibus cum erra-
ticorum, tum etiam fixorum siderum motus facillime
calculari possunt Ratio duodecim domorum
cœli, Authore Ioanne de Monte regio. Præfatio Philippi
Melanchthonis. 4to. Norimbergæ, 1536
Schönfeld (Eduard):
: Nova elementa Thetidis, deducta ex observationibus
annorum 1852 et 1853. [Inaugural Dissertation.]
4to. Bonnae, 1854
*Beobachtungen von veränderlichen Sternen. Angestellt
auf der königlichen Sternwarte zu Bonn, 8vo. Wien, 1861
: *Catalog von veränderlichen Sternen mit Einschluss der
neuen Sterne. Mit Noten. Svo. Mannheim [1866]

Schönfeld (Eduard)-continued.

— : Zweiter Catalog von veränderlichen Sternen. Mit Noten. 8vo. [Mannheim, 1874]

- : Frédéric Argelander (traduit par E. Mailly).

8vo. (Bruxelles).

#### Schoof (W. G.):

Improvements in the lever-escapement for watches and marine chronometers.

Svo. London, 1874

### Schooten (Fr. van):

Tabulæ Sinuum, tangentium, secantium, ad radium 10000000. 16mo. Amsterdam, 1627

### Schöpffer (Carl):

Die Bewegungen der Himmelskörper. Neue und unwiderlegliche Beweise dass unsere Erde im Mittelpunkte des Weltalls steht, und Sonne, Mond und Sterne sich um dieselbe bewegen. Svo. Braunschweig, 1854

### Schorr (F.):

— : Der Voriibergang der Venus vor der Sonnenscheibe am 9.

December 1874 und die Bestimmung der Entfernung der Sonne.

Svo. Braunschweig, 1873

— : Der Venusmond und die Untersuchungen über die früheren Beobachtungen dieses Mondes. Svo. Braunschweig, 1875

### Schram (Robert):

\*Hilfstafeln für Chronologie.

4to. Wien, 1883

Schreckenfuchs (E. O.), see Garcaus; Ptolemy.

#### Schröder (G.)

Sonnenflecken-Beobachtungen im Januar 1861. Inaugural-Dissertation. Svo. Göttingen, 1861

#### Schröder (J. F. L.):

Oratio de majoribus corporum coelestium permutationibus, quatenus ex iis progressum naturæ in his corporibus formandis suspicari licet. [Inaugural Dissertation.]

8vo. Trajecti ad Rhenum, 1816

## Schroeder (Karl):

La rotation souterraine de la masse ignée, ses causes et ses conséquences.

8vo. Paris, 1856

# Schrön (Ludwig):

Seven-figure logarithms of numbers from 1 to 108,000, and of sines, cosines, tangents, cotangents, to every 10 seconds of the quadrant. . . . Fifth edition . . . . with a description of the tables added by A. De Morgan. 4to. London, 1865

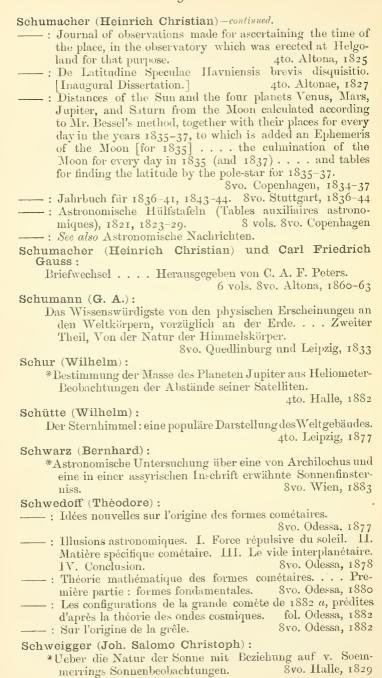
### Schröter (Johann Hieronymus):

— : Beobachtungen über die Sonnenfackeln und Sonnenflecken samt beylæufigen Bemerkungen ueber die scheinbare Flæche, Rotation und das Licht der Sonne. 4to. Erfurt, 1789

— : Selenotopographische Fragmente zur genauern Kenntniss der Mondfläche, ihrer erlittenen Veränderungen und Atmosphäre, sammt den dazu gehörigen Specialcharten und Zeichnungen. 2 vols. 4to. Göttingen, 1791–1802

Schröter (Johann Hieronymus)—continued.
: Aphroditographische Fragmente, zur genauern Kenntniss
des Planeten Venus; cammt beygefügter Beschreibung des
Lilienthalischen 27-füssigen Telescops, mit practischen
Bemerkungen und Beobachtungen über die Grösse der
C(-1, 2,C
: Lilienthalische Beobachtungen der neu entdeckten Planeten
Ceres, Pallas und Juno. 8vo. Göttingen, 1805
: Kronographische Fragmente zur genauern Kenntniss des
Planeten Saturn, seines Ringes und seiner Trabanten.
Erster Theil. 8vo. Göttingen, 1808
: Beobachtungen des grossen Cometen von 1807; sammt
einem Nachtrage zu den aphroditographischen Fragmenten.
8vo. Göttingen, 1811
: Areographische Beiträge zur genauern Kenntniss und
Beurtheilung des Planeten Mars, in mathematisch-phy-
sischer Hinsicht Herausgegeben von H. G. van de
Sande Bakhuyzen. Svo. [with Atlas in fol.], Leiden, 1881
-: Areographische Fragmente, see Terby (F.).
. 211cographiselic Tragmente, see Terby (1.).
Schubart (Th.):
Description et notices sur l'installation et l'entretien des
Météorographes graveurs de Van Rysselberghe & Schubart.
8vo. Gand, 1880
Schubert (E.):
: Tables of Harmonia computed for the American
Ephemeris and Nautical Almanac. 4to. Washington, 1869
- : Tables of Parthenope computed for the American
Ephemeris and Nautical Almanac. 4to. Washington, 1871
Schubert (Friedrich Theodor):
: Populäre Astronomie. Erster Theil. Geschichte der
Astronomie und sphärische Astronomie.
8vo. St. Petersburg, 1804
: Traité d'astronomie théorique.
3 vols. 4to. St. Pétersbourg, 1822
Schubert (Gotthilf Heinrich von):
—: Die Urwelt und die Fixsterne. Eine Zugabe zu den
Ansichten von der Nachtseite der Naturwissenschaft.
8vo. Dresden, 1822
—: Ditto zweite Auflage.
8vo. Dresden und Leipzig, 1839
: Lehrbuch der Sternkunde für Schulen und zum Selbstun-
towishts Dritts Andres Cree Euleman - 24
terrichte Dritte Auflage. 8vo. Erlangen, 1847
Schubert (T. F. de):
: Exposé des travaux astronomiques et géodésiques exécutés
en Russie dans un but géographique jusqu'à l'année 1855,
avec supplément. 4to. St. Pétersbourg, 1858
avec supplément. 4to. St. Pétersbourg, 1858: *Essai d'une détermination de la véritable figure de la
Terre. 4to. St. Pétersbourg, 1859
: *Sur l'influence des attractions locales dans les opérations
géodésiques. 4to. Altona, 1860

Schulhof et Bossert, see Paris, Observatoire.
Schultz (Hermann):
: Declinations-Bestimmungen mit dem Dollond'schen Durch-
gangs-Instrumente auf der Berliner Sternwarte. 4to. Berlin, 1858
: *Mars-Beobachtungen 1862. 8vo. Upsala, 1862
-: *Mikrometrisk bestämning af 104 stjernor inom tele
scopiska stjerngruppen 20 Vulpeculæ. 4to. Stockholm, 1873
: *Micrometrical observations of 500 Nebulæ.
4to. Upsala, 1874 ——: *Om komparations-stjernorna vid nebulos-observationerna
i Upsala. 8vo. Stockholm, 1875
: *Normalorter och oskulerande element för planeten Alex-
andra (54). Svo. Stockholm, 1875
— : Sieriska astronomins grundbegrepp. 8vo. Upsala, 1879
Schultzen (Georg):
Figur und Himmelsgestalten den Sonnenfinsterniss und grossen Gegenscheine der obern drey Planeten Saturni,
Jovis und Martis, so sich begeben am 29. Martii, 17. Aprilis
und 13. Juni altes Calenders im Jahr Christi MDCXXXIII,
4to. Leipzig.
Schulze (Gottlob Leberecht):
— : Das veranschaulichte Weltsystem, oder die Grundlehren der Astronomie und deren leichte und sichere Veranschau-
lichung durch eigenthümliche Versinnlichungswerkzeuge
dargestellt und nachgewiesen. 8vo. Leipzig, 1838
- : Astronomia per Nicolaum Copernicum instaurata religionis
et pietatis Christianae per Martinum Lutherum ad scrip-
turae sacrae normam repurgatae egregia adjutrix. [Inau- gural Dissertation.] Svo. Budissae, 1830
, ,
Schulze (L. R.):  ——: Über den Lauf des D'Arrest'schen Cometen. [Inaugural-
Dissertation.] 4to. Schwerin, 1862
: *Elemente des ersten Cometen vom Jahre 1830, mit
Berücksichtigung von 319 Beobachtungen.
Schumacher (Heinrich Christian):
—: Nachricht über den Apparat, dessen er sich zur Messung
der Basis bei Braack im Jahre 1820 bedient hat. (Schrei-
ben an Olbers.) 4to. Altona, 1821
: Ephemeris of the distances of the four planets Venus,
Mars, Jupiter and Saturn from the Moon's center for 1823 ('25, '27) to which are annected tables for finding
the latitude by the polar-star for 1823, '27, '29.
4to. Copenhagen, 1821–27
: Astronomische Abhandlungen. Heft 1-3.
4to. Altona, 1823-25
: Sammlung von Hülfstafeln, zweites Heft; Tafeln zur Reduction der in der 'Histoire Céleste' enthaltenen Beobach-
tungen Svo Copenhagen 1827



Schweizer (Gottfried):

-----: \*Bericht . . . . ueber die Expedition nach Machnowka, behufs der Beobachtungen der totalen Sonnenfinsterniss des Jahres 1851. 8vo. Moskau, 1851

— : \*Untersuchungen ueber die in der Naehe von Moskau stattfindende Local-Attraction. 8vo. Moskau, 1863

Schwerd (Friedrich Magnus):

---: Die Beugungserscheinungen aus den Fundamentalgesetzen der Undulationstheorie, analytisch entwickelt, und in Bildern dargestellt. 4to. Mannheim, 1835

- : See also Speyer, Sternwarte.

Schwilgué (Th.):

Kurze Beschreibung der astronomischen Uhr des Strasburger Münsters. 12mo. Strasburg, 1857

Schwinck (G.):

Mappa coelestis sive tabulae quinque inerrantium septimum ordinem non excedentium et usque ad xxx gradum decl. austr. pertinentium. fol. Lipsiae, 1843

Schyanoff (Alexandre):

Essai sur la métaphysique des forces inhérentes à l'essence de la matière, et introduction à une nouvelle théorie atomodynamique. . . . Deuxième édition. Svo. Kiew, 1868

Science. An Illustrated Journal. Vol. 1-3.

4to. Cambridge, Mass., 1883-84

Science Observer. A Journal for Scientists. Vol. 1-4.

Svo. Boston, 1877-82

Scientific Memoirs, selected from the transactions of foreign Academies of Science and learned Societies, and from foreign Journals. Edited by Richard Taylor. Vol. 1, Vol. 2, Part 5, 6. 8vo. London, 1837–39

Scientific Opinion. Jan.-June, 1870. 4to. London.

Scientific Roll, and Magazine of systematized Notes.

Conducted by Alexander Ramsay. No. 1-11.

8vo. London, 1880-83

Scoresby (William):

Magnetical investigations. Part 1. 8vo. London, 1739

Scott (Robert H.):

— : Instructions in the use of meteorological instruments.

Svo. London, 1875

- : See also London, Meteorological Office.

Searle (Arthur):

\*The zodiacal light. 8vo. Philadelphia [1883]

Secchi (Angelo):

---: \*Ricerche di reometria elettrica. Svo. Roma, 1850

— : \*Sopra un nuovo fotometro destinato specialmente a misurare l' intensità relativa della luce delle stelle.

4to. Roma, 1851

Secchi (Angelo)—continued.
-: *Sopra le osservazioni fatte alla Specola del Collegio
Romano durante l' eclisse del 28 Luglio 1851.
4to. Roma, 1852
: *Researches on electrical rheometry. 4to. Washington, 1852
: *Sulle apparenze osservate nell' anello di Saturno nel 1850
e 1851. 4to. Roma, 1852
-: *Pontificia corrispondenza meteorologica telegrafica in
Roma. 4to. Roma, 1855
-: *Ricerche sulla luce elettrica. 8vo. Torino, 1856
-: *Osservazioni di Saturno e suoi anelli. 4to. Roma, 1856
: *Usservazioni di Saturno e suoi anemi. 4to. Roma, 1950
-: *Intorno ad un nuovo barometrografo. 4to. Roma, 1857
— : Misura della base trigonometrica eseguita sulla Via Appia
1854–55. 4to. Roma, 1858
: *Sulle Macchie Solari e del modo di determinare la pro-
fondità. 4to. Roma, 1858
: Quadro fisico del sistema solare. 8vo. Roma, 1859
*Coll white released at 1 Table 1960 Properties
: *Sulla ecclisse solare del 18 Luglio 1860. 8vo. Roma, 1860
: Relazione delle osservazioni fatte in Spagna durante
l' ecclisse totale del 18 Luglio 1860. 8vo. Roma, 1860
· Catalogo di 1221 [1221] stelle doppie misurate col grande
equatoriale di Merz all' Osservatorio del Collegio Romano
e confrontate colle misure anteriori. 4to. Roma, 1860
-: *Alcune ricerche meteorologiche sulle tempeste occorse nel
1859-60. 4to. Roma, 1860
: *Osservazioni e ricerche astronomiche sulla grande cometa
del Giugno 1861. 8vo. Roma, 1861
: *Intorno alla relazione che passa tra i fenomeni meteoro-
logici e le variazioni del magnetismo terrestre. Memoria 2.
4to. Roma, 1862
-: *Sulle fotografie del sole fatte durante l'ecclisse totale del
: *Stille lotografie dei sole latte dul'ante i ecclisse totale dei
18 Luglio 1860. 4to. Roma [1862]
- : *L' unità delle forze fisiche; saggio di filosofia naturale.
8vo. Roma, 1804
: *Ricerche sulla corrente elettrica, e sue analogie coi feno-
meni idraulici. 4to. Roma, 1864
: *Les découvertes spectroscopiques dans leurs rapports avec
la recherche de la nature des corps célestes. (Traduit par
A. Gautier.) 8vo. Genève, 1865
-: *Le scoperte spettroscopiche in ordine alla ricerca della
natura de' corni celesti. 8vo. Roma, 1865
: *Sulle condizioni igieniche del Clima di Roma.
8vo. Roma, 1865
: *Sugli spettri prismatici delle stelle fisse. 4to. Firenze, 1867
Sugii spectri prismatici delle stene asse. 400. i irenzo, 1007
— : La météorologie et le météorographe à l'Exposition univer-
selle. 8vo. Paris, 1867
: *Ricerche sulle macchie solari e i loro movimenti.
8vo. Roma, 1867
: *Le recenti scoperte astronomiche. 8vo. Roma, 1868
: *Sull' ultima publicazione del prof. Volpicelli intorno alla
: *Sull' epocha vera e la durata della cecità del Galileo.
8vo. [Roma, 1868]

Specific (America) continued
Secchi (Angelo)—continued.
: *On stellar spectrometry. Svo. London [1868]: *Sugli spettri prismatici delle stelle fisse. (Memorie 1 e 2.)
8vo. Roma, 1868
— : *Sulla grande nebulosa di $\theta'$ Orione. 4to. Firenze, 1868
-: *Serie seconda delle misure micrometriche fatte all' equa-
toriale di Merz del Collegio Romano dal 1863 al 1866 in-
clusive. Stelle doppie e nebulose. 4to. Roma, 1868
—: Ditto, serie terza, see Ferrari.
-: *Fisica solare. Sulle ultime scoperte spettroscopiche fatte
nel sole. Svo. Roma, 1869
-: *Sugli spettri prismatici de' corpi celesti. Memoria 3.
(Ricerche spettrali sul sole.) 4to. Firenze, 1870
—: *Sul Sole. Svo. Roma, 1870
: *Rapporto della Commissione per la misura del meridiano
centrale Europeo negli Stati Pontifici. 4to. Roma, 1871
— : *Sulle protuberanze solari e le facole. 4to. Roma, 1871
: *Sopra un nuovo metodo spettroscopico. 4to. Roma, 1871
—: *Ricerche Solari. 4to. Roma, 1871
: *Sulla distribuzione delle protuberanze intorno al disco
solare [&c.]. Communicazioni 3–13. 4to. Roma, 1871–75
: *Sugli spettri prismatici de' corpi celesti. 4to. Roma, 1872
— : Note spettroscopiche sul sole e gli altri corpi celesti.
8vo. Roma, 1872
: *Sull' Aurora Elettrica del 4 Febbraio 1872.
4to. Roma, 1872
-: *Sull' ultima ecclisse del 12 Dicembre 1871.
4to. Roma, 1872 : Die Sonne. Die wichtigeren neuen Entdeckungen über
ihren Bau, ihre Strahlungen, ihre Stellung im Weltall und
ihr Verhältniss zu den übrigen Himmelskörpern
Autorisirte deutsche Ausgabe und Originalwerk
herausgegeben von Dr. H. Schellen.
2 vols. 8vo. Braunschweig, 1872
: *Riassunto delle osservazioni sulle protuberanze solari e la
loro distribuzione fatte all' Osservatorio del Collegio Romano
nell' anno 1871. Svo. Pisa, 1872
: *Il traforo delle Alpi nella catena del Moncenisio al Colle
di Frejus. 4to. Roma, 1872
: *Di alcuni fenomeni accaduti nella scarica di un fulmine
in Alatri. 4to. Roma, 1872
: *Le stelle cadenti del 27 Novembre 1872. 4to. Roma, 1873
: *Cenni sulle macchie solari e la loro teoria.
8vo. Roma, 1873
—: *Intorno a due critiche fatte dal Sig. Bertrand ad alcuno
teoria solari del P. Angelo Secchi. 8vo. Roma, 1874
: *Studi fisici sulle comete del 1874. 8vo. Roma, 1874
-: *Note relative à l'observation du passage de Vénus devant
le Soleil au moyen du spectroscope. 4to. Paris [1874]
- : Le Soleil Deuxième édition, revue et augmentée.
2 vols. 8vo. with atlas of plates. 4to. Paris, 1875-77
-: *Sulla pioggia osservata al Collegio Romano dal 1825 al
1874. 4to. Roma, 1875

	(Angelo)—continued.
:	*Studi fisici fatti all' Osservatorio del Collegio Romano sulle
	comete di Tempel (II) e Coggia (III) nel 1874. Seconda
	communicazione. 4to. Roma, 1875
:	*Su gli ultimi avanzamenti dell' astronomia fisica e in par-
	ticolare sulle macchie solari. 8vo. Roma, 1875
:	*Sull' ultimo passaggio di Venere avanti al sole nel Dicembre 1874. 4to. Roma, 1875
	bre 1874. 4to. Roma, 1875 *Prodromo di un catalogo fisico delle stelle colorate.
	4to. Palermo, 1876
:	*Di alcuni fatti relativi all' origine della grandine.
•	4to. Roma, 1876
:	Les étoiles, essai d'astronomie sidérale.
	2 vols. 8vo. Paris, 1879
:	*Un orologio solare antico. 8vo.
:	Determinazione di longitudine, see Fergola e Secchi.
:	*Progetto di un monumento meteorologico da erigersi in
	Roma alla memoria del P. Angelo Secchi. 4to. Roma.
:	See also Rome, Collegio Romano; Life, see Cacciatore (G.);
	Ferrari (G. S.).
Sector	, The description and use of the, the crosse-staffe, and other
	instruments, for such as are studious of mathematicall
	practise. 4to. London, 1624
644411	ot (J. J.)., Instruments des Arabes, see Aboul Hhassan Ali.
Beuili	ot (0.0.)., Then the most test traces, see the tracestal tracestal traces
	ot (L. Amédée):
	*Nouvelles recherches pour servir à l'histoire de l'astrono-
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  8vo. Paris, 1836
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes. 8vo. Paris, 1836 *Mémoire sur les instruments astronomiques des Arabes.
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  8vo. Paris, 1836  *Mémoire sur les instruments astronomiques des Arabes.  8vo. Paris, 1841
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  8vo. Paris, 1836  *Mémoire sur les instruments astronomiques des Arabes.  8vo. Paris, 1841  *Mémoire sur les systèmes géographiques des Grecs et des
: :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  Svo. Paris, 1841  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  4to. Paris, 1842
: :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  Svo. Paris, 1841  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  4to. Paris, 1842  *Sur la détermination de la troisième inégalité lunaire, ou
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  Svo. Paris, 1841  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  4to. Paris, 1842  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  4to. Paris, 1843
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Université l'histoire de l'astronomiques des Arabes.  4to. Paris, 1843  4to. Paris, 1844  *Sur la découverte de la variation.
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la décou-
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grees et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Charis, 1844  *Charis, 1845
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grees et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences
:	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Téponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Péponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Péponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du X° siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du X° siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.  8vo. Paris, 1863
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du X° siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.  8vo. Paris, 1863  *Sur l'origine de la semaine planétaire, et de la spirale de Platon.  4to. Rome, 1874  *Sur les emprunts que nous avons faits à la science arabe,
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grees et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grees et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.  8vo. Paris, 1863  *Sur l'origine de la semaine planétaire, et de la spirale de Platon.  4to. Rome, 1874  *Sur les emprunts que nous avons faits à la science arabe, et en particulier de la détermination de la troisième iné-
: : :	*Nouvelles recherches pour servir à l'histoire de l'astronomie chez les Arabes.  *Mémoire sur les instruments astronomiques des Arabes.  *Mémoire sur les systèmes géographiques des Grecs et des Arabes.  *Sur la détermination de la troisième inégalité lunaire, ou variation, par les Arabes.  *De la latitude de la lune.  *Sur la découverte de la variation.  *Réponse à quelques observations nouvelles sur la découverte de la variation, ou troisième inégalité lunaire, par les astronomes arabes du Xe siècle.  Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux.  2 vols. 8vo. Paris, 1845-49  Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux.  8vo. Paris, 1863  *Sur l'origine de la semaine planétaire, et de la spirale de Platon.  4to. Rome, 1874  *Sur les emprunts que nous avons faits à la science arabe,

[---]: Note relative à une édition des Tables Astronomiques

—: Zur Theorie der Doppelsternbewegungen. Inaugural-

-: \*Untersuchungen über die Bewegungsverhaltnisse in dem

Svo.

8vo. Leipzig, 1872

4to. Wien, 1881

Sédillot (L. Amédée) - continued.

Seeliger (Hugo):

Dissertation.

mentatio.

Serpieri (Alessandro):

Serooskerken (R. C. van Tuyll):

-: See also Paris, Observatoire.

d'Oloug-Beg, commencée en 1839.

dreifachen Sternsystem & Cancri.

Séguin (Aîné): Considérations sur les lois qui président à l'accomplissement des phénomènes naturels rapportés à l'attraction Newtonienne. Svo. Paris, 1861 Seibt (Wilhelm), see Berlin, K. preuss. geodät. Institut. Seidel (Ludwig): ---: \*Untersuchungen über die gegenseitigen Helligkeiten der Fixsterne erster Grösse, und über die Extinction des 4to. München, 1852 Lichtes in der Atmosphüre. - : \*Untersuchungen über die Lichtstärke der Planeten Venus, Mars, Jupiter und Saturn verglichen mit Sternen, und über die relative Weisse ihrer Oberflächen. 4to. München, 1859 Seinsheim (Philippus L. B. de): Disquisitio astronomica de correctione calendarii. [Inaugural Dissertation. 4to. Ingolstadtii, 1699 Selenographical Society: The Selenographical Journal, Vol. 1-5. Svo. London, 1879-83 [Seller (John)]: Practical Navigation, or an introduction to the whole art. 4to. Semler (Christian Gottlieb): ---: Vollständige Beschreibung von dem neuen Cometen des 1742sten Jahres, samt einer astronomischen Wiederlegung das der Stern der Weisen kein Comet gewesen . . . . Svo. Halle, 1742 — : Vollständige Beschreibung des Sterns der Weisen, wobey zugleich der grosse Unterschied desselben von einem Cometen gezeiget, und von der wahren Zeit der Geburt Christi . . . . Mit A. N. Grischows . . . . Tage-Register von dem Cometen des 1743sten Jahres. Svo. Halle, 1743 Sepulveda (Joannes Genesius) Cordubensis:

De correctione anni mensivmque Romanorym . . . . com-

Disputatio mathematica inauguralis de latitudine ex observatis duabus astrorum altitudinibus computanda.

\*La luce zodiacale, sue leggi e teoria cosmico-atmosferica, dedotte dalle osservazioni di G. Jones. 4to. Palermo, 1876

Svo. Lutetiæ Parisiorum, 1547

4to. Trajecti ad Rhenum, 1823

Serret (Joseph Alfred), see Paris, Observatoire.
Sestini (Benedetto):
: Memoria sopra i colori delle stelle del Catalogo di Baily.
4to. Roma, 1845
Settimanni (César):
- : D'une nouvelle méthode pour déterminer la parallaxe du soleil. Svo. Florence, 1869 - : D'une seconde nouvelle méthode pour déterminer la parallaxe du soleil. Svo. Florence, 1870 - : Nouvelle théorie des principaux éléments de la lune et du soleil. 4to. Florence, 1871 - : Supplément. 4to. Florence, 1874
Seue (C. de):
Windrosen des südlichen Norwegens. 4to. Kristiania, 1876
Sexe (S. A.):
Le Glacier de Boium en Juillet 1868. 4to. Christiania, 1869
Sextant:  The description and use of a new astronomical instrument for taking altitudes of the Sun and Stars at sea, without an horizon [&c.].  4to. London, 1735
Seydler (August):
*Über die Bahn der Dione (106) [2 papers]. 8vo. Wien, 1872-77
Seyffarth Gustav.:
<ul> <li>: Beitraege zur Kenntniss der Literatur, Kunst, Mythologie und Geschichte des alten Aegypten.</li> <li>*Corrections of the present theory of the Moon's motions, according to the classic eclipses.</li> <li>8vo. Philadelphia, 1877</li> </ul>
Shadwell (Charles F. A.):  : Tables for facilitating the approximate prediction of occul-
tations and eclipses for any particular place.  8vo. London, 1847
: Tables for facilitating the determination of the latitude at sea by the simultaneous altitudes of two stars.
8vo. London, 1849  ——: Tables for facilitating the determination of the latitude and time at sea by observations of the stars New edition.  8vo. London, 1854
: Notes on the management of chronometers and the measurement of meridian distances.  Svo. London, 1855 : Ditto. New edition.  Tables for facilitating the reduction of lunar observations.  8vo. London, 1860

Shadwell (Charles F. A.)—continued.
: Formulæ of navigation and nautical Astronomy. [Set of
cards in case.] London, 1856
—: Ditto. Revised editions. 1869 and 1878
——: Notes on interpolation, mathematical and practical.
8vo. London [1879]
S[harp], A[braham]:
Geometry improv'd: 1. by a large and accurate table of seg-
ments of circles with compendious tables for finding
a true proportional part, and their use exemplify'd
in making out logarithms or natural numbers from them,
to sixty figures, there being a table of them for all primes
to 1100, true to 61 figures. 2. A concise treatise of
polyedra, or solid bodies of many bases. 4to. London, 1717
Sharpless (Isaac):
*The latitude of Haverford College Observatory.
8vo. Philadelphia, 1883
Sheepshanks (Richard):
: Tables containing the logarithms of A, B, C, D, for every
day in the year 1829. 8vo. London, 1829
—: Tables for facilitating astronomical reductions.
4to. London, 1846
: A reply to Mr. Babbage's letter to the <i>Times</i> 'on the
planet Neptune and the Royal Astronomical Society's
Medal.' 8vo. London, 1847
-: A letter to the Board of Visitors of the Greenwich Royal
Observatory, in reply to the calumnies of Mr. Babbage
with correspondence prefixed.
8vo. London, 1860 (1854)
—: *Memoir. 8vo. London, 1856
Shepheard's Kalender (the), newly augmented and corrected.
fol. [London].
(Shepherd, Antony):
Tables for correcting the apparent distance of the Moon and
a star from the effects of refraction and parallax. Published
by order of the Commissioners of Longitude.
4to. Cambridge, 1772
Sherwin (Henry):
: Mathematical tables The third edition, carefully revised
and corrected, by William Gardiner. Svo. London, 1741
—: Ditto. The fourth edition. Svo. London, 1761
Shires (William):
The principles of mechanics, in three lectures; designed as an
introduction to this branch of the mathematics.
Shortrade (Reheat)
Shortrede (Robert):
: Compendious logarithmic tables, embracing logarithms to
numbers and numbers to logarithms, with logarithmic sines
and tangents to every five minutes of the quandrant.
8vo. Edinburgh, 1844

Shortrede (Robert)—continued.
logarithms to numbers from 1 to 120,000; numbers to
logarithms from to 1.00000; logarithmic sines and
tangents to every second of the circle, with arguments in
space and time, and new astronomical and geodesical
space and time, and new astronomical and geodesical
tables. 8vo. Edinburgh, 1844
: Logarithmic tables to seven places of decimals, containing
logarithmic sines and tangents to every second of the circle,
with arguments in space and time. 8vo. Edinburgh, 1849
-: Traverse tables to five places for every 2' of angle up to 100
of distance. Edited by Edward Sang.
4to. Edinburgh, 1864
Sidereal heavens (a theory of the structure of the), including
an explanation of the phenomena of the via lactea and
nebulæ, founded on a new astronomical doctrine.
4to. London, 1842
Sideraal Massanger (the) A monthly journal devoted to As-
Sidereal Messenger (the). A monthly journal devoted to Astronomical Science. Edited by O. M. Mitchel. Vol. 1, 2,
tronomical Science. Edited by O. M. Mitchel. Vol. 1, 2,
and Vol. 3, No. 1, 2. 4to. Cincinnati, 1846-48
Sidereal Messenger (the). Conducted by Wm. W. Payne.
Vol. 1, 2. 8vo. Northfield, Minn., 1883-84
voi. 1, 2. 8vo. ivortifileta, minn., 1803-04
Sidler (Georg):
— : Die Theorie der Kugelfunktionen. (Programm der Berner
Kantonsschule, 1861.) 4to. Bern, 1861
-: Zur Dreitheilung eines Kreisbogens. (Programm der
Berner Kantonsschule, 1876.) 4to. Bern, 1876
Siemens (Charles William):
—: *On the dependence of radiation on temperature.
8vo. London, 1883
—: On the conservation of solar energy: a collection of papers
and discussions. Svo. London, 1883
: *On the conservation of solar energy: reply to Mr.
E. H. Cook. 8vo. London, 1883
Simonena (Diama).
Sigorgne (Pierre):
— : Praelectiones astronomiae Newtonianae, ad usum studiosae
juventutis Edidit Aug. Frid. Boeckius.
8vo. Tubingae, 1769
: Institutions Newtoniennes Seconde édition.
Svo. Paris, 1760
8vo. Paris, 1769
8vo. Paris, 1769 ——: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780
: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin) :
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin) : First principles of chemistry. 8vo. Philadelphia, 1866
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin) :
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin) : First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science.
—: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science. Simmler (Rudolph Theodor):
—: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science. Simmler (Rudolph Theodor): Beiträge zur chemischen Analyse durch Spectralbeobachtun-
—: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science. Simmler (Rudolph Theodor):
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science. Simmler (Rudolph Theodor): Beiträge zur chemischen Analyse durch Spectralbeobachtungen. 8vo. Chur, 1861
—: Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780  Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866  Silliman's Journal, see American Journal of Science.  Simmler (Rudolph Theodor): Beiträge zur chemischen Analyse durch Spectralbeobachtungen. 8vo. Chur, 1861  Simmons (G. Harvey):
— : Institutiones astronomiæ Newtonianæ. 8vo. Tubingæ, 1780 Silliman (Benjamin): First principles of chemistry. 8vo. Philadelphia, 1866 Silliman's Journal, see American Journal of Science. Simmler (Rudolph Theodor): Beiträge zur chemischen Analyse durch Spectralbeobachtungen. 8vo. Chur, 1861

Simms	Fred	arick	W).

A treatise on the principal mathematical instruments employed in surveying, levelling, and astronomy.

Svo. London, 1834

### Simms (William):

: The achromatic telescope, and its various mountings, especially the equatorial: to which are added some hints on private observatories.

8vo. London, 1852

---: The sextant and its applications; including the correction of observations for instrumental errors, and the determination of latitude, time and longitude by various methods, on land and at sea.

8vo. London, 1858

#### Simon (T. C.):

Scientific certainties of planetary life; or, Neptune's light as great as ours, with various other hitherto unconsidered facts connected with the residence of moral agents in the worlds that surround the stars.

Svo. London, 1855

Simonelli (Jacob Philip), Ignatius Kegler, et Melchior a Briga:

Scientia Eclipsium ex imperio et commercio Sinarum illustrata, complectens Integras constructiones astronomicas J. P. Simonelli; Observationes Sinicas &c. Ignatii Kegler; Investigationes ordinis eclipsium Melchioris a Briga.

4 parts in 2 vols. 4to. Rome et Luce, 1744-47

## Simonoff (Ivan):

--: \*Sur l'emploi des hauteurs correspondantes en mer.

8vo. St. Pétersbourg 1840

- : Recherches sur l'action magnétique de la terre.

Svo. Kazan, 1840

## Simotta (George):

A theater of the planetary hovres for all dayes of the yeare, wherein may be gathered from the earth vnder the coelestiall influences divers sorts of hearbs... for the vse of physick... the Sunne rising, and to finde the determinate houre of it. Translated out of Greeke... fitted to our calculation (by G. Baker).

4to. London, 1631

## Simpson (Thomas):

— : A new treatise of fluxions, wherein the direct and inverse method are demonstrated after a new, clear, and concise manner, with their application to physics and astronomy.

4to. London, 1737

---: The nature and laws of chance. 4to. London, 1740

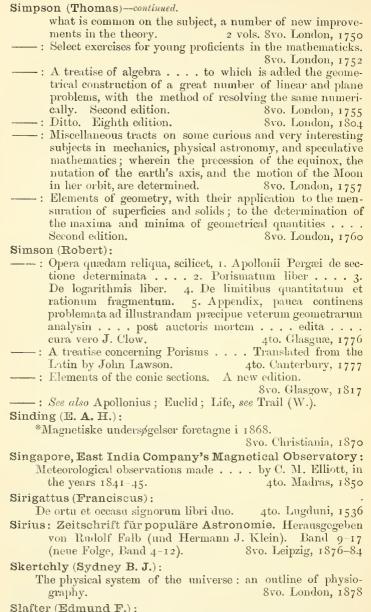
Essays on several curious and useful subjects in speculative and mix'd mathematicks, illustrated by a variety of examples.

4to. London, 1740

----: Trigonometry, plane and spherical; with the construction and application of logarithms.

8vo. London, 1748

---: The doctrine and application of fluxious, containing, besides



History and causes of the incorrect latitudes as recorded in the journals of the early writers, navigators and explorers, relating to the Atlantic coast of North America, 1535–1740. 8vo. Boston, 1882

## Slawinsky (Piotra):

— : Poczatki Astronomii teoretyczney i praktyczney.

8vo. Wilnie, 1826

---: \*Notice sur les observatoires en Angleterre. 4to. Vilna, 1835 ---: Remarques sur les observations faites à l'Observatoire de Vilna au cercle répétiteur de Reichenbach, de dix-huit pouces de diamètre.

4to. Vilna, 1835

Slop (J. et F.): see Pisa.

## Slusius [Sluse] (René François):

Mesolabum, seu duæ mediæ proportionales inter extremas datas per circulum et per infinitas hyperbolas, vel ellipses et per quamlibet exhibitæ, ac problematum omnium solidorum effectio per easdem curvas; accessit pars altera de 4to. Leodii Eburonum, 1668 analysi, et miscellanea.

## Small (Robert):

An account of the astronomical discoveries of Kepler, including an historical review of the systems which had successively prevailed before his time. 8vo. London, 1804

## Smeaton (John):

---: Experimental enquiry concerning the natural powers of wind and water to turn mills and other machines [&c.].

Svo. London, 1796

---: Reports . . . . made on various occasions, in the course of his employment as a civil engineer. 3 vols. 4to. London, 1812

### Smee (Alfred):

---: New definition of the Voltaic circuit, with formulæ for ascertaining its power under different circumstances.

8vo. London, 1842

---: On the intimate rationale of the Voltaic force . . . . Second edition. 8vo. London, 1842

#### Smith (James):

A new treatise of fluxions.

8vo. London, 1737

## Smith (John):

Horological disquisitions, discovering the true nature of time, or the reasons why all days from noon to noon are not alike twenty-four hours long. Second edition. Svo. London, 1708

## Smith (Robert):

A compleat system of Opticks, in four books . . . . to which are added remarks upon the whole.

2 vols. 4to. Cambridge, 1738

## Smith (Robert Angus):

A centenary of science in Manchester. (For the hundredth year of the Literary and Philosophical Society of Manchester.) 8vo. London, 1883

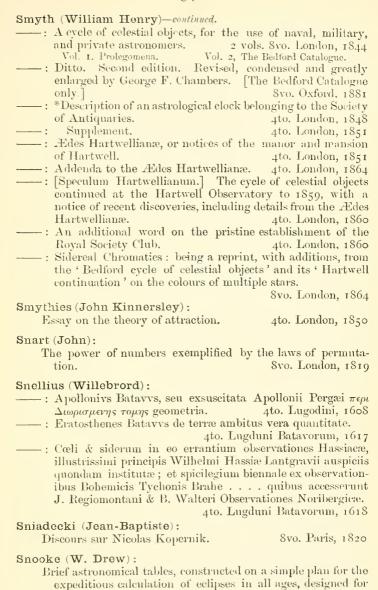
Smithsonian Institution, see Washington.

## Smyth (Charles Piazzi):

-: \*Notice of the orbit of the binary star a Centauri, as recently determined by Capt. W. S. Jacob.

4to. Edinburgh, 1848

Smyth (Charles Piazzi)—continued.
: *On the determination of the true strength and direction of
the wind at sea. 4to. Edinburgh, 1848
: *Contributions to a knowledge of the Zodiacal Light.
4to. Edinburgh, 1852
: *On the total solar eclipse of 1851. 4to. Edinburgh, 1852
: Teneriffe, an Astronomer's experiment: or, specialities of
a residence above the clouds. Svo. London, 1858
: *Report on the Teneriffe astronomical experiment of 1856.
4to. Edinburgh, 1858
—: *Experiences with a free-revolver stand for a telescope at
sea, during a voyage to Teneriffe in the summer of 1856.
8vo. London, 1857
- : *Suggested explanation of Messrs. Carrington and Hodg-
son's recently observed solar phenomenon.
8vo. London, 1860
: *On the methods adopted to secure extreme accuracy in
the Edinburgh Castle time gun signal. 8vo. Edinburgh, 1861
: *On the reputed meteorological system of the Great Pyramid.
4to. Edinburgh, 1864
: *Exhibition of a series of photographs illustrating the land
of Egypt, the great pyramid [&c.]. 8vo. Edinburgh, 1866
: *On intensified gravity in centrifugal governors of driving
clocks and steam-engines.  8vo. Glasgow, 1869
—: *On an equal surface projection for maps of the world, and
its applications to certain anthropological questions.
8vo. Edinburgh, 1870
: A poor man's photography at the Great Pyramid in the
year 1865: compared with that of the ordnance survey
year 1005; compared with that of the ordinance survey
establishment under the order of Col. Sir Henry
James. 8vo. London, 1870
-: *End-on illumination in private spectroscopy, and its appli-
cations to both blow-pipe flames and electric illumined
gas-vacuum tubes. 8vo. Edinburgh, 1879
-: *Carbon and carbo-hydrogen, spectroscoped and spectro-
meted in 1879. Svo. London, 1879
: *The solar spectrum in 1877 and 1878, with some practical
idea of its probable temperature of origination.
4to. Edinburgh, 1879.
: *Gaseous spectra in vacuum tubes under small dispersion
and at low electric temperature; including an appendix by
A. S. Herschel. 4to. Edinburgh, 1881
: Madeira Spectroscopic; being a revision of 21 places in the
red half of the solar visible spectrum, with a Rutherfurd
diffraction grating. 4to. Edinburgh, 1882
: *On the constitution of the lines forming the low-tempera-
ture spectrum of oxygen. 4to. Edinburgh, 1882
—: Observations, see Edinburgh, Royal Observatory.
County (Williams Transparent
Smyth (William Henry):
: *Account of a private observatory recently erected at Bed-
ford. 4to. London [1830]



### Snow (Robert):

---: Observations of the Aurora Borealis from September 1834 to September 1839. 12mo. London, 1842

Svo. London, 1852

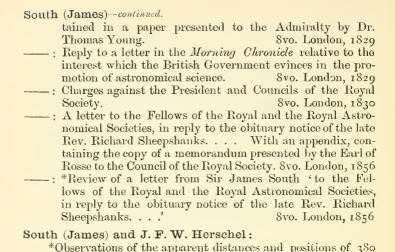
the purpose of verifying dates.

: A manual chiefly of definitions, introductory to the plane astronomy of the globes.

8vo. London, 1847

Società degli Spettroscopisti Italiani:
Memorie. Raccolte e pubblicate per cura del Prof. P.
Tacchini. Vol. 1–12. 4to. Palermo e Roma, 1872–83
Società Italiana delle Scienze:
——: Memorie di matematica e di fisica. Tomo 19-25.
4to. Modena, 1821–55
: Ditto. Serie seconda. Tomo 1, 2. 4to. Modena, 1862-66
—— : Ditto. Serie terza. Tomo 1–5. 4to. Firenze (e Napoli), 1867–82
: Questione della Società. 8vo. Torino, 1861
Society for Opposing the Endowment of Research, Ex-
tracts reprinted by the.  8vo. London, 1881
Society for the Diffusion of Useful Knowledge:
: Library of useful knowledge: Natural philosophy.
3 vols. 8vo. London, 1829–34
Vol. 3 contains astronomy, history of astronomy, mathematical geo-
graphy, physical geography, and navigation.
—: Six maps of the stars. fol. London, 1830
: Six maps of the stars [large maps]. London, 1836
: The Stars in six maps, on the gnomonic projection. Origi-
nally designed and arranged by Sir John Lubbock, Bart.,
and published under the superintendence of the S. D. U. K.
fol. London, n.d.
: An explanation of the gnomonic projection of the sphere, and of such points of astronomy as are most necessary in
the use of astronomical maps. By A. De Morgan.
8vo. London, 1836
Companion to the Society's maps of the Stars.
- : Lives of eminent persons; consisting of Galileo, Kepler,
Newton, &c. 8vo. London, 1833
: Tables of logarithms. 12mo. London, 1839
: See Barlow (P.), Mathematical Tables; De Morgan (A.);
Penny Cyclopædia.
Socoloff (A.):
*Sur la queue du 1 <sup>er</sup> type de la comète de 1858, V.
8vo. Moscou, 1884
Sodargna (Antonio):
Annotazioni sul canto xviii dell' Iliade ossia dimos-
trazione del vero sistema planetario conosciuto ed allegori- camente descritto da Omero. 8vo. Venezia, 1847
Sæmmering (S. Th.): Maculæ Solis, see Thilo (L.).
Sofka (Franz Octav):
Die kosmischen Abkühlungen: ein meteorologisches Prinzip.
8vo. Wien, 1863
8vo. Wien, 1863 Sohneke (Leonhard A.):
Sohneke (Leonhard A.):  ——: Bibliotheca Mathematica. Verzeichniss der Bücher über
Sohneke (Leonhard A.):  ——: Bibliotheca Mathematica. Verzeichniss der Bücher über die gesammten Zweige der Mathematik welche
Sohneke (Leonhard A.):  : Bibliotheca Mathematica. Verzeichniss der Bücher über die gesammten Zweige der Mathematik welche vom Jahre 1830 bis Mitte des Jahres 1854 erschie-
Sohneke (Leonhard A.):  — : Bibliotheca Mathematica. Verzeichniss der Bücher über die gesammten Zweige der Mathematik welche vom Jahre 1830 bis Mitte des Jahres 1854 erschienen sind.  8vo. Leipzig, 1854
Sohneke (Leonhard A.):  : Bibliotheca Mathematica. Verzeichniss der Bücher über die gesammten Zweige der Mathematik welche vom Jahre 1830 bis Mitte des Jahres 1854 erschie-

Sohneke (Ludwig Adolph):
De motu corporum coelestium in medio resistente Dissertatio
[Inauguralis]. 4to. Regiomontii Prussorum, 1833
Somerville (Mary):
: Mechanism of the heavens. 8vo. London, 1831
——: On the connexion of the physical sciences Second
edition. 8vo. London, 1835
: Physical Geography. 2 vols. 8vo. London, 1848
Sonnenschmidt (Hermann):
Kosmologie. Geschichte und Entwicklung des Weltbaues,
unter Zugrundelegung der neuesten Forschungen der Wis-
senschaft. 8vo. Leipzig, 1878
Souchon (Abel):
Traité d'astronomie pratique, comprenant l'exposition du
calcul des éphémérides astronomiques et nautiques.
Svo. Paris, 1883
Souciet (E.): Observations mathématiques, astronomiques, géographiques,
chronologiques, et physiques, tirées des anciens livres
Chinois, ou faites nouvellement aux Indes et à la Chine,
par les pères de la Compagnie de Jésus, rédigées et publiées
par E. S. Tome 1. 4to. Paris, 1729
Soulas (A. L.):
La levée des plans et l'arpentage rendus faciles. Deuxième
édition. 12mo. Paris, 1820
Sourdon (Huet de):
Sourdon (Huet de): Éléments d'astronomie, propres à servir d'explication et de
Sourdon (Huet de):
Sourdon (Huet de): Éléments d'astronomie, propres à servir d'explication et de
<ul> <li>Sourdon (Huet de):         Éléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807     </li> <li>South (James):         Practical observations on the Nautical Almanac and Astro-     </li> </ul>
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  — : Practical observations on the Nautical Almanac and Astronomical Ephemeris.  8vo. London, 1822
<ul> <li>Sourdon (Huet de):         <ul> <li>Éléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> </ul> </li> <li>South (James):         <ul> <li>Practical observations on the Nautical Almanac and Astronomical Ephemeris.</li> <li>8vo. London, 1822</li> <li>*Corrections in Right Ascension of 37 stars of the Green-</li> </ul> </li> </ul>
<ul> <li>Sourdon (Huet de):         Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> <li>South (James):         — : Practical observations on the Nautical Almanac and Astronomical Ephemeris.         Svo. London, 1822</li> <li> : *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.</li> <li>8vo. London, 1823</li> </ul>
<ul> <li>Sourdon (Huet de):         Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> <li>South (James):         — : Practical observations on the Nautical Almanac and Astronomical Ephemeris.         Svo. London, 1822</li> <li>— : *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.         Svo. London, 1823</li> <li>— : *Inquiry how far the opinions generally entertained of the</li> </ul>
<ul> <li>Sourdon (Huet de):         Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> <li>South (James):         — : Practical observations on the Nautical Almanac and Astronomical Ephemeris.         Svo. London, 1822</li> <li>- : *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.         Svo. London, 1823</li> <li>- : *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satel-</li> </ul>
<ul> <li>Sourdon (Huet de):         <ul> <li>Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> </ul> </li> <li>South (James):         <ul> <li>Practical observations on the Nautical Almanac and Astronomical Ephemeris.</li> <li>8vo. London, 1822</li> <li>*Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.</li> <li>8vo. London, 1823</li> <li>*Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.</li> <li>8vo. London, 1824</li> </ul> </li> </ul>
<ul> <li>Sourdon (Huet de):</li></ul>
<ul> <li>Sourdon (Huet de):         Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> <li>South (James):         — : Practical observations on the Nautical Almanac and Astronomical Ephemeris.         — : *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.         — : *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.         — : *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of</li> </ul>
<ul> <li>Sourdon (Huet de):</li></ul>
<ul> <li>Sourdon (Huet de):</li></ul>
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanac and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London.
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanae and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *Au inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London.  8vo. London.
<ul> <li>Sourdon (Huet de):     Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807</li> <li>South (James):     Practical observations on the Nautical Almanae and Astronomical Ephemeris.     Svo. London, 1822</li> <li>*Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.     8vo. London, 1823</li> <li>*Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.     8vo. London, 1824</li> <li>*An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.     8vo. London, 1824</li> <li>*Astronomical phenomena, arranged in the order of succession, for 1824.     8vo. London.</li> <li>*On the discordances between the Sun's observed and computed right ascensions as determined at the Blackman Street</li> </ul>
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanae and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London.  **On the discordances between the Sun's observed and computed right ascensions as determined at the Blackman Street Observatory during the years 1821-22.
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanac and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London, 1824  —: *On the discordances between the Sun's observed and computed right ascensions as determined at the Blackman Street Observatory during the years 1821-22.
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanae and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London.  **On the discordances between the Sun's observed and computed right ascensions as determined at the Blackman Street Observatory during the years 1821-22.
Sourdon (Huet de):  Eléments d'astronomie, propres à servir d'explication et de développement à la machine astronomique. 8vo. Paris, 1807  South (James):  —: Practical observations on the Nautical Almanac and Astronomical Ephemeris.  Svo. London, 1822  —: *Corrections in Right Ascension of 37 stars of the Greenwich Catalogue.  8vo. London, 1823  —: *Inquiry how far the opinions generally entertained of the inutility of observations of Jupiter's third and fourth satellites are well or ill founded.  8vo. London, 1824  —: *An inquiry how far it would be advisable that the daily corrections in Right Ascension and North Polar distance of the forty-six zero stars should be computed annually at the public expense.  8vo. London, 1824  —: *Astronomical phenomena, arranged in the order of succession, for 1824.  8vo. London.  2vo. London, 1824  Svo. London, 1824



## 1823.

double and triple stars, made in the years 1821, 1822, and

4to. London, 1825

----: Catalogue of the special loan collection of scientific apparatus.

8vo. London, 1877

# Späth (Johann Leonhard):

Ueber die Entstehung und Ausbildung des Sternhimmels, oder die Cosmogonie in Grundlegung der neuesten Beobachtungen nach eigenen Ansichten aufgestellt. 8vo. Nürnberg, 1815

## Spence (William):

——: Outlines of a theory of algebraical equations, deduced from the principles of Harriott, and extended to the fluxional or differential calculus.

8vo. London, 1814

----: Mathematical Essays . . . . edited by John F. W. Herschel, with a biographical sketch of the author. 4to. London, 1819

# Speyer, Sternwarte:

Astronomische Beobachtungen angestellt auf der Sternwarte des Königl. Lyzeums . . . von F. M. Schwerd, . . . 1826–27. Abtheilung 1, 2. 4to. Speyer, 1829–30

# Spiller (Philipp):

Die Entstehung der Welt und die Einheit der Naturkräfte. 8vo. Berlin, 1870

#### Spinola (Francesco):

De Intercalandi ratione corrigenda, & de tabellis quadratorum numerorum, à Pythagoreis dispositorum. 8vo. Venetiis, 1562

### Spittler (Johann Friedrich):

De parallaxi longitudinis atque latitudinis planetarum. [Inaugural Dissertation.] 4to. Tubingæ, 1756

Spörer (G.): ---: \*Beobachtungen . . . . über die Sonnenflecken (Anclam). 8vo. Berlin, 1865 --: \*Beobachtungen der Sonnenflecken zu Anclam. Part 1 & 2. 4to. Leipzig, 1874-76 Spottiswoode (William): Polarisation of light. 12mo, London, 1874 Sprat (Thomas), Bishop of Rochester: ---: The history of the Royal Society of London for the improving of natural knowledge. Second edition. 4to. London, 1702 ——: Ditto. Fourth edition. 4to. London, 1734 Squarcialupus (Marcus), De Cometis, see Erastus and others. Squire (Jane): A proposal for discovering our longitude. [English and French. 4to. London, 1742 Stadius (Joannes): —: Ephemerides novæ et exactæ . . . . ab anno 1554 ad 4to. Coloniae Agrippinae, 1556 annum 1570. —: Ephemerides novæ, auctæ, et repurgatæ . . . . ab anno 1554 usque ad annum 1600. 4to. Coloniæ Agrippinæ, 1570 Standards of Weight and Measure: —: Report of the Commissioners appointed to consider the steps to be taken for restoration of the standards of weight and measure. fol. London, 1841 - : See also Airy (G. B.); London, Board of Trade; Paris, Comité International. Stanley (William Ford): A descriptive treatise on mathematical drawing instruments. 8vo. London, 1866 Star Catalogues: See Knobel (E. B.), Chronology of star catalogues. Star Charts: Al Sûfi: Description des étoiles fixes. Trad. avec notes par H. C. F. C. Schjellerup, 1874. Argelander (F. W. A.): Atlas des nördlichen gestirnten Himmels. 1863 ---: Uranometria Nova, stellæ per mediam Europam solis oculis conspieuæ. 1843. Bayer (J.): Uranometria, omnium asterismorum continens schemata. Bazley (T.): The stars in their courses. 1878. Behrmann (C.): Atlas des südlichen gestirnten Himmels, 1874. Berlin, Akademische Sternkarten. 1859. Bishop's Ecliptic Charts. Epoch 1825. Bode (J. E.): Représentation des astres. 1782.

- : Uranographia, sive astrorum descriptio. 1801. Carrington (R. C.): Circumpolar charts for 1855. Dien (Ch.): Atlas Céleste. n.d. [Epoch 1860.] Doppelmaier (J. G.): Atlas coelestis. 1742.

#### Star Charts-continued.

Flamsteed (J.): Atlas cœlestis. 1781.

--: Atlas céleste (Fortin). 1776.

Goldbach (C. F.): Neuester Himmelsatlas. 1799.

Gould (B. A.): Uranometria Argentina. 1879.

Green (J.): Astronomical Recreations: Position and mythological history of the constellations. 1824.

Harding (K. L.): Atlas novus coelestis. 1822.

--: Neuer Himmelsatlas: neue Ausgabe. 1856.

Heis (E.): Atlas Cœlestis novus: stellæ per mediam Europam solis oculis conspicuæ. 1872.

---: Atlas Cœlestis Eclipticus ad delin. Lumen Zodiacale. 1878.

— : Fünf Sterncharten zum Einzeichnen der Sternschnuppen. 1868. Herschel (J. F. W.): Results of astronomical observations made at the Cape of Good Hope. 1847.

Hevelius (J.): Firmamentum Sobiescianum, sive Uranographia. 1690.

Hoffmann (K. F. V.): Vollständiger Himmelsatlas. 1835.

Houzeau (J. C.): Uranométrie générale. Atlas de toutes les étoiles visibles à l'œil nu. 1878. [Brussels, Annales de l'Observatoire, nouv. sér., Toni. I.]

Jamieson (A.): Celestial Atlas. 1822.

Littrow (J. J.): Atlas des gestirnten Himmels. 2nd ed. 1854; 3rd ed. 1S66.

Middleton (J.): Celestial Atlas, of stars visible in Great Britain. 1840.

Paris, Observatoire: Atlas écliptique, par Chacornac, Henry, &c.

Peters (C. H. F.): Celestial Charts. n. d. [Epoch 1860.]

Piccolomini (A.): De la sfera del mondo. Ist ed. 1548; 2nd ed. 1570. Proctor (R. A.): The Stars in 12 maps. 1866.

- : Constellation Seasons: guide to the knowledge of the stars. 1867.

- : Large Star Atlas. fol. 1870.

--: A new Star Atlas. 8vo. 1875.

---: Half Hours with the stars: guide to the Constellations. 1877.

Rome, Collegio Romano: Stelle del catalogo di Baily, contrassegnate secondo loro diversi colori. n. d.

Rost (J. L.): Atlas portatilis celestis. 8vo. 1743.

Schiller (J.): Celum Stellatum Christianum. 1627.

Schlegel (G.): Atlas céleste Chinois et Grec. 1875.

Schwinck (G.): Mappa coelestis. 1843.

Society for the Diffusion of Useful Knowledge. Six maps of the stars. [Small] 1830; n.d.; [large] 1836.

Turin Academy, Atlante di carte celesti. u.d. [Epoch 1880.]

Wollaston (F.): A portraiture of the heavens as they appear to the naked eye. 1811.

#### Stark (Paul):

Johannes Kepler. Sein Verhältniss zur schwäbischen 8vo. Gotha, 1868 Heimath 1596-1619.

Stars (the) and the Earth; or, thoughts upon space, time, and 2 parts, 8vo. London, 1846-47 eternity.

—: Ditto. 6th edition. 2 parts, 8vo. London, 1854

#### Steell (Robert):

A treatise of conic sections.

8vo. Dublin, 1723

Steffens (Johann Heinrich):

Die grosse Sonnenfinsterniss im Jahr 1820, nebst allgemeinen und besonderen Betrachtungen über Sonn- und Mondfinsternisse.

8vo. Wien, 1820

Stehr (L.):

Das Weltsystem, erforscht und durch Berechnung bewiesen.

. . . Zweite Auflage.

8vo. Berlin, 1872

Steinheil (Carl August von):

Copie des Meter der Archive zu Paris. 4to. München, 1844

Stella (Rupertus):

The astrologian's guide in horary astrology.

12mo. London, 1832

Stephan (E.):

Rapport sur l'observation de l'éclipse de soleil du 18 août 1868. Svo. Paris, 1869

Stephan (É.) et Maurice Loewy:

\*Détermination de la différence des longitudes entre Paris-Marseille et Alger-Marseille. 4to. Paris, 1878

Stern (Moriz A.):

Himmelskunde. Volksfasslich bearbeitet.

8vo. Karlsruhe, 1844

Stevin (Simon):

— : Les Œuvres Mathématiques . . . . où sont insérées les mémoires mathématiques esquelles s'est exercé le . . . . Prince Maurice de Nassau, Prince d'Aurenge. Le tout reveu, corrigé & augmenté par Albert Girard.

2 vols. in 1, fol. Leyde, 1634

- : Life, see Quetelet (L. A. J.).

Stewart (Balfour):

The conservation of energy: being an elementary treatise on energy and its laws. Third edition. 8vo. London, 1874

Stewart (Matthew):

Some general theorems of considerable use in the higher parts of mathematics.

8vo. Edinburgh, 1746

: Propositiones geometrieæ, more veterum demonstratæ, ad geometriam antiquam illustrandam et promovendam idoneæ.

8vo. Edinburgi, 1763

Stieber (Friedrich Carl Gustav):

\*Die wahre Gestalt der Planeten- und Kometenbahnen.

4to. Dresden, 1864

Stirling (James):

 Lineæ tertii ordinis Neutonianæ, sive illustratio tractatus
 D. Neutoni de enumeratione linearum tertii ordinis; cui subjungitur solutio trium problematum. Svo. Oxoniæ, 1717

— : Methodus differentialis, sive tractatus de summatione et interpolatione serierum infinitarum. 4to. Londini, 1730

Stirrup (Thomas):

Horometria, or the compleat diallist. . . . The second edition.

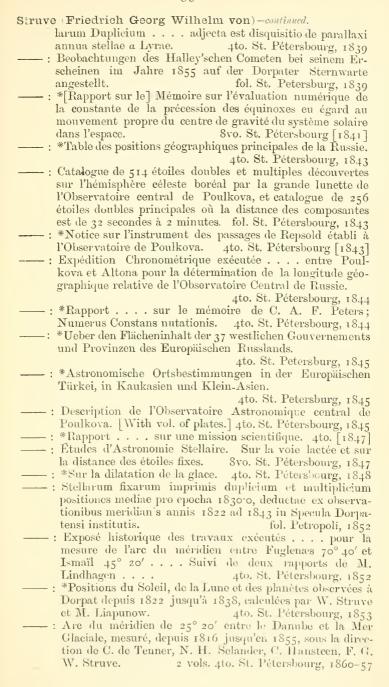
Stockholm, Kongliga Svenska Vetenskaps Akademie:
— : Handlingar. Ny Följd, 1855–79. Bandet 1–17.
4to. Stockholm, 1858-81
——: Bihang till Handlingar. Bandet 1–5. 8vo. Stockholm, 1872–80
: Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar,
1844-80. Årgången 1-37. 8vo. Stockholm, 1845-81
: Lefnadsteckningar. Bandet 1, 2. Svo. Stockholm, 1869-78
Stockholm, Observatorium:
Astronomiska Iakıtagelser och Undersökningar Ut-
gifna af Hugo Gyldén. Bandet 1. 4to. Stockholm, 1880
Stockwell (John N.):
-: A treatise on the secular equations of the Moon's mean
motion. 8vo. Cambridge [U.S.], 1867
: Theory of the Moon's motion. 4to. Philadelphia, 1875
— : Ditto. 2nd edition. 4to. Philadelphia, 1877
-: The theory of the Moon's motion deduced from the law of
universal gravitation. 4to. Philadelphia, 1881
Stöffler [Stoefflerus, Stoefflerinus] (Johann):
: Elvcidatio fabricae vsvsque Astrolabii nuper Ingeni-
ose cōcinnata atque in lucem edita.
fol. Oppenheym, 1513 (1512)
— : Tabulæ Astronomicæ. Verarum mediarumque coniunc-
tionū & oppositionum Solis & Lunæ exactissima supputatio
pro omni tempore. Et toti propemodum Europæ accom-
moda. Cyclorum patrum antiquorum de coniunctionu &
opposition u reditu imperfectio & fere redargutio. Eclipsium
luminarium prædictio. Eiusdem Instrumenti astrologici
additio. fol. Tubingæ, 1514 ——: Der Römisch Kalender Cristlicher Kirchen zu Ere
Un dem Groszmechtigsten Maximiliano Römischem Keyser
&c. zu Ewiger gedechtnus Auch Gemeynem volck zu under-
richtung Gerechet und geordent. fol. Oppenheym, 1518
: Calendarium Romanum magnum, Cæsareæ maiestati dica-
tum. [1518-1579.] fol. Oppenheym, 1518
tum. [1518-1579.] fol. Oppenheym, 1518 ——: Ephemerides, 1544-5, see Pitatus, Almanach novum.
Stokes (George Gabriel):
Mathematical and physical papers. 2 vols. Cambridge, 1880-83
Stone (Edmund):
A new mathematical dictionary. 8vo. London, 1726
Stone (Edm.) and G. F. A. de l'Hôpital:
— : The method of fluxions both direct and inverse : the former
being a translation from the celebrated Marquis De l'Hos-
pital's Analyse des infiniment petits, and the latter supply'd
by the translator, E S 8vo. London, 1730
—: See also L'Hôpital (G. F. A. de).
Stone (Edward James):
5

: [Address on the transit of Venus, delivered at the meeting of the subscribers to the South African Public Library.]

8vo. ('ape Town, 1872)

Stone (Edward James) continued.
-: *Places of eight close southern circumpolar stars.
8vo. Cape Town, 1874 ——: Cape Catalogues and Observations, see Cape of Good Hope,
Royal Observatory.
—: Radcliffe Observations, see Oxford.
Stone (Ormond):
-: *On the extra-meridian determination of time by means of a portable transit instrument. Svo. Cincinnati -: Measures of double stars, see Cincinnati Observatory.
Stonyhurst College Observatory:
Results of meteorological and magnetical observations, 1865.  8vo. Clitheroe
Storer (W.):  Syllabus to a course of optical experiments on the syllepsis
optica, or the new optical principles of the royal delineator analysed.  4to. [London, 1782]
[Stow, John]:
A hermit's idea that the stars are the homes of the heavenly hosts.  4to, London, 1862
hosts. 4to. London, 1862 Strachan (R.):
Principles of weather forecasts and storm prevision. 2nd
edition. 8vo. London, 1868
Strachey (Edward):
Bija Ganita, or the algebra of the Hindus. 4to. London, 1813
Strasbourg (Cathédrale de): ——: Description abrégée de l'horloge astronomique.
12mo. Štrasbourg, 1854
— : See also Schwilgué (Th.).
Strasser (P. G.):  Mittlers Övten von [750] Evytermen, bezogen auf deg mittlers
Mittlere Örter von [750] Fixsternen, bezogen auf das mittlere Aequinoctium 1870 o abgeleitet aus den Beobachtungen der
Sternwarte Kremsmünster. 8vo. Kremsmünster, 1877
Stratford (William Samuel):
*On the elements of the orbit of Halley's Comet, at its appearance in the years 1835 and 1836. 8vo. London, 1837
Strauchius [Strauch] (Ægidius):
: Aphorismi astrologici methodice in usum docentium et dis- centium collecti; accessit Cypriani Leovitii de judiciis nativitatum doctrina Editio secunda.
12mo. Witteberge, 1675 ——: Tabulæ sinuum, tangentium, logarithmorum et per universam mathesin. Auctiores & correctissimæ Acces-
sere Leonh. Christ. Sturmii tabulæ planè novæ.  8vo. Amstelodami, 1700
-: Tabellen der Sinuum, Tangentium, Logarithmorum, und zu der gantzen Mathesi [mit] L. C. Sturmii Tabellen.  8vo. Amsterdam, 1700
The same work as the foregoing with introduction in German

Strauchius [Strauch] (Ægidius)—continued.
-: Astrognosia synoptice et methodice in usum gymnasiorum et
academiarum adornata; addita sunt asterismorum et plane-
tarum schemata Editio quinta.
12mo. Vitembergæ, 1722
Streete (Thomas):
: Astronomia Carolina, a new Theorie of the Cœlestial Motions.
Composed according to the Best Observations and most
Rational Grounds of Art. Yet farre more Easie, Expedite
and Perspicuous than any before Extant. With exact and
most Easie Tables thereunto, and Precepts for the Calcula-
tion of Eclipses, &c. 4to. London, 1661 : Astronomia Carolina, with exact and most easy tables and
: Astronomia Carolina, with exact and most easy tables and rules for the calculation of eclipses. The third edition
to which is added a series of observations on the planets,
chiefly of the Moon, made in order to find out the
Lunar Theory a posteriori, being a proposal how to find the
longitude, &c. By Dr. Edmund Haley [sic].
4to. London, 1716
Streit (Johann):
De problematis Kepleriani solutionibus. Dissertatio Inau-
guralis astronomica. 8vo. Gryphisvaldiae, 1861
Strode (Thomas):  A New and Easie Method to the Art of Dyalling. Contain-
ing I. All Horizontal Dyals, all upright Dyals, Reflecting
Dyals, Dyals without Centres, Nocturnal Dyals, Upright
Declining Dyals II. The most Natural and Easie
Way of Describing the Curve-Lines of the Sun's Declination
on any Plane. 4to. London, 1688
Struve (Friedrich Georg Wilhelm von):
— : Der Ort des Sterns δ Ursae minoris in seiner oberen Cul-
mination für jeden Tag der Jahre 1820, 1821, 1822.
8vo. Dorpat, 1821
: *Catalogus 795 stellarum duplicium ex diversorum astro-
nomorum observationibus congestus in specula Dorpa-
tensi. 4to. Dorpati, 1822
- : Beschreibung des auf der Sternwarte der kaiserlichen
Universität zu Dorpat befindlichen grossen Refractors von Fraunhofer. fol. Dorpat, 1825
Fraunhofer. fol. Dorpat, 1825 —: Catalogus novus stellarum duplicium et multiplicium
maxima ex parte in specula Universitatis Caesareae Dorpa-
tensis detectarum. fol. Dorpati, 1825
: Beschreibung der von der Universität zu Dorpat
veranstalteten Breitengradmessung in den Ostseeprovinzen
Russlands, ausgeführt und bearbeitet in den Jahren 1821-31.
2 parts, 4to. Dorpat, 1831
— : Ueber Doppelsterne nach den auf der Dorpater Sternwarte
von 1824 bis 1837 angestellten Micrometermessun-
gen. 8vo. St. Petersburg, 1837
: Stellarum duplicium et multiplicium Mensurae Microme-
tricae per magnum Fraunhoferi tubum annis a 1824 ad
1837 in Specula Dorpatensi institutae. fol. Petropoli, 1837
: *Additamentum in Mensuras Micrometricas Stel-



Struve (Friedrich Georg Wilhelm von) -continued.
: *Vergleichungen der Wiener Masse mit mehreren auf der
K. Russischen Hauptsternwarte zu Pulkowa befindlicher
Masseinheiten. (Mit Nachtrag von K. von Littrow.)
8vo. Wien, 186
: A summary or index of the measurements in the 'Stella
rum duplicium et multiplicium mensuræ micrometricæ;
'Additamentum in Mensuras micrometricas'
including all the stars in the Synopsis observationum de
stellis duplicibus in Specula Dorpatensi, 1814-24 :
and in the 'II. Mensure micrometrice.' (Dun Echt Obs
Publications, vol. I.) 4to, Dun Echt. 1876
: See Dorpat; Pulkowa. Life, see Pritchard (C.).
Struve (Hermann):
: *Über den Einfluss der Diffraction an Fernröhren au
Lichtscheiben. 4to. St. Pétersbourg, 1882
-: *Zur Theorie der Talbot'schen Linien.
Struve (Ludwig):  4to. St. Pétersbourg, 1882
*Resultate aus den in Pulkowa angestellten Vergleichunger
von Procyon mit benachbarten Sternen.
4to. St. Pétersbourg, 1883
Struve (Otto von):
-: *Bestimmung der Constante der Praecession, mit Berück
sichtigung der eigenen Bewegung des Sonnensystems.
4to. St. Petersburg, 1842
: *Détermination des positions géographiques de Novgorod
Moscou, Riazan, Lipetsk, Voronèje et Toula.
Moscou, Mazan, Enpersk, Voroneje et Toura.
4to. St. Pétersbourg, 1843
: *Observations de la Comète de Biéla.
8vo. St. Pétersbourg, 1846
: *Résultats géographiques du voyage en Perse, fait par le
Capitaine Lemm en 1838 et 1839. 4to. St. Pétersbourg, 1851
: Narratio de Parallaxi Stellae a Lyrae. [Inaugural Disserta
tion.] 4to. Petropoli, 1852
: *Sur les dimensions des anneaux de Saturne.
4io. St. Pétersbourg, 1852
: *Expéditions chronométriques de 1845 et 1846.
4to. St. Pétersbourg, 1853
: *Beobachtungen des Biela'schen Cometen im Jahre 1852
angestellt am grossen Refractor der Pulkowaer Sternwarte.
4to. St. Petersburg, 1854
: *Positions géographiques déterminées en 1847 par le
Lieutenant-Colonel Lemm dans le pays des Cosaques du
Don. 4to. St. Pétersbourg, 1855
: Éloge de P. H. Fuss. 4to. St. Pétersbourg, 1857
: *Nouvelle détermination de la parallaxe annuelle des
étoiles a Lyrae et 61 Cygni. 4to. St. Pétersbourg, 1859
: *Beitrag zur Feststellung des Verhältnisses von Keppler zu
Wallenstein. 4to. St. Petersburg, 1860
: Übersicht der Thätigkeit der Nicolai-Hauptsternwarte
without der rindigkeit der ricotal-riauptsternwarte
während der ersten 25 Jahre ihres Bestehens,

Struve (Otto von)—continued.

---: \*Beobachtungen des grossen Kometen von 1861.

4to. St. Pétersbourg, 1868

- ---: Tabulae Auxiliares ad transitus per planum primum verticale reducendos inservientes.

  Svo. Petropoli, 1868
- Tabulae quantitatum Besselianarum pro annis 1750–1884 computatae. 8vo. Petropoli, 1869–79
- : \*Mittheilung über unternommene Beobachtungsreihen zur Vergleichung von Mikrometermessungen.

8vo. Leipzig, 1876

-: \*Études sur le mouvement relatif des deux étoiles du système de 61 Cygni. 4to. St. Pétersbourg, 1880

---: See Pulkowa, Nicolai Hauptsternwarte.

### Struve (Otto von) et M. Liapunow:

\*Observations de la grande Nébuleuse d'Orion, faites à Cazan et à Poulkova. 4to. St. Pétersbourg, 1862

### Struve (O. von) et A. Winnecke:

- : \*Pulkowaer Beobachtungen des grossen Cometen von 1858. Abth. 1, Beobachtungen am Refractor von O.... S.... Abth. 2, Beobachtungen am Heliometer, nelst Untersuchungen über die Natur der Cometen, von A.... W.... 4to. St. Petersburg, 1859
- Student (the), containing many curious receipts and preparations, striking experiments, . . . . discoveries and . . . . improvements in the arts and sciences. No. 1-4.

  12mo. Liverpool, 1797-1800

Student and Intellectual Observer of Science, Literature, and Art. Vol. 1-5. 8vo. London, 1868-71

#### Sturgeon (William):

Scientific researches, experimental and theoretical, in electricity, magnetism, galvanism, electro-magnetism, and electro-chemistry.

4to. Bury, 1850

## Sturm (Johann Christoph):

Mathesis enucleata, or the elements of the mathematicks (and an introduction to specious analysis, or the new geometry).

2 parts in 1 vol. 8vo. London, 1700

Sturm (Leonh. Christ.): Tabulæ planè, see Strauchius.

# Stürmer (Johann Christoph.):

Vorstellung der grossen Sonnenfinsterniss und der partialen Mondsfinsterniss 1804, auf den Nürnbergischen Meridian und die benachbarte Gegend entworfen.

4to. Nürnberg, 1803

# Sussex (Duke of):

Addresses delivered at the Anniversary Meeting of the Royal Society, 1833 and 1836.

4to. London, 1833–36

### Svanberg (Jons):

Exposition des opérations faites en Lapponie, pour la détermination d'un arc du méridien, en 1801, 1802 et 1803.

Svo. Stockholm, 1805

Steron (William)
Swan (William):  —: *On the red prominences seen during total eclipses of the Sun.  4to. Edinburgh, 1852
: *On the total eclipse of the Sun, July 28, 1851, observed at Göteborg; with a description of a new position micrometer.  4to. Edinburgh, 1852
Swedenborg (Emanuel):
Concerning the earths in our solar system, which are called planets, and concerning the earths in the starry heaven.  Translated from the Latin. 8vo. London, 1787
Swedish Calculating Machine: Specimens of tables calculated, stereomoulded, and printed by machinery.  8vo. London, 1857
Switzerland, Schweizerische Geodätische Commission:: Das Schweizerische Dreiecknetz Erster Band. Die Winkelmessungen und Stationsausgleichungen.
4to. Zürich, 1881 : See also Hirsch et Plantamour, Nivellement de la Suisse; Wolf (R.), Geschichte der Vermessungen in der Schweiz.
Sydney Observatory:
: Astronomical Observations made in the year 1859, by W. Scott. 8vo. Sydney, 1860
: Astronomical and Meteorological observations made in the year 1860, by W. Scott. 8vo. Sydney, 1861
——: Results of astronomical observations made in the years 1877 and 1878, under the direction of H. C. Russell.  8vo. Sydney, 1881
— : Meteorological Observations made at the Government Observatory, Sydney (and an abstract from the Country
Stations), 1867–77, under the direction of G. R. Smalley (and H. C. Russell). 8vo. Sydney, 1867–77
——: Abstract of Meteorological Observations made in New South Wales during 1865 and 1866, under the direction of
George R. Smalley. 8vo. Sydney, 1869 : Abstract of Meteorological Observations made in New
South Wales up to the end of 1869, with remarks on the climate. By H. C. Russell. 8vo. Sydney, 1871
——: Results of Meteorological Observations made in New South Wales, 1870, 1871, 1873-79. Svo. Sydney, 1871-80
——: Results of rain (and river) observations made in New South Wales during 1878–82. 8vo. Sydney, 1879–83
: Report of the Astronomer for 1859, 1865, 1872. fol. Sydney: *Results of double star measures made 1871 to 1881,
under the direction of H. C. Russell. 8vo. Sydney, 1882 ——: Longitude of, see Tebbutt (J.).
Sydney, Royal Society of New South Wales:
: Transactions of the Philosophical Society of New South Wales, 1862-65. 8vo. Sydney, 1866
: Transactions of the Royal Society of New South Wales, 1867-74. Vol. 1-8. Svo. Sydney, 1868-75

Sydney, Royal Society of New South Wales continued.
: Transactions and Proceedings of the Royal Society of New
South Wales, 1875. Vol. 9. Svo. Sydney, 1876
: Journal and Proceedings of the Royal Society of New South
Wales, 1876-82. Vol. 10-16. 8vo. Sydney, 1877-83 The Title of the Society was changed to 'Royal Society' in 1867.
: *Anniversary address, by H. C. Russell. 8vo. Sydney, 1883
Sykes (Arthur Ashley):  A dissertation on the eclipse mentioned by Phlegon, or
an enquiry whether that eclipse had any relation to the
darkness that happened at our Saviour's passion.
Svo. London, 1732
Sykes (William Henry):
*Storm warnings, their importance and practicability.
8vo. London, 1867
Sylvester (Jas. Joseph):
: *Analytical development of Fresnel's optical theory of crys-
tals. Svo. London, 1837
: *Memoir on rational derivation from equations of coexist- ence, that is to say, a new and extended theory of elimin-
ation. Part 1. Svo. London, 1839
-: *On a theory of the syzygetic relations of two rational
integral functions. 4to. London, 1853
— : Outlines of (seven) lectures on the partitions of numbers.
8vo. Woolwich, 1859
- : *Outline trace of the theory of Reducible Cyclodes, i.e. a
particular family of successive involutes to a circle whose
determination depends on the solution of an Algebraico-
Diophantine equation, and of the number and classification
of the forms of such family for any given order of successive Landon 1860
sion. 8vo. London, 1869 ——: Address delivered at Johns Hopkins University,
Feb. 22, 1877. Svo. Baltimore, 1877
Symons (G. J.), see London, Meteorological Office, and Meteorological Society.
Table for determining the apparent time from observed altitudes
of the Sun or a Star.  8vo. printed at the head-quarters of the army in France, 1818
<b>Table of log</b> $\frac{vers\ P}{sin\ 1^n}$ to every second of time as far as $1^h$ oom.
4to. Poona, 1842
Tables. (Article from the English Cyclopædia, Vol. 7.)
4to. London, 1861
Tables (general) of equations of equal altitudes. 8vo.
Tabulæ astronomicæ and astrologicæ, or an Ephemeris of
the coelestial motions for the years 1657-58, [with] a tutor
to astrologie. By W. E., Philomat. 12mo, London, n.d.
Tacchini (Pietro):
: *Sulla equazione personale. 8vc., 1869
—: Sull' ecclisse totale di sole del 22 Dicembre 1870, visibile
dalla Sicilia. Svo.

333
Tacchini (Pietro)—continued.  —: *Il sole e le Aurore Boreali osservate in Palermo nell' Aprile 1871. 4to. Palermo, 1871  —: *Forme delle protuberanze : regioni del magnesio e del ferro sulla superficie del sole. 8vo. Palermo, 1872  —: Il passaggio di Venere sul sole dell' 8-9 Dicembre 1874, osservato a Muddapur nel Bengala pubblicata a spese del Ministero della pubblica Istruzione.  4to. Palermo, 1875  —: *Sull' Eclisse totale di Sole del 17 Maggio 1882, osservato a
Soliage in Egitto. 4to. Roma, 1882
Tacchini (Pietro) ed A. Nobile:  *Determinazione Telegrafica della differenza di longitudine fra gli Osservatorii di Napoli e Palermo. 4to. Napoli, 1874
Tacquet (Andreas):  The Elements of Arithmetick, in three books; the seventh, eighth and ninth of Euclid.  8vo. London, n.d.
Tacubaya, Observatorio Astronómico: Anuario, 1884–85. 12mo. México, 1883–84
Taintor (E. C.): Catalogue of 384 Transit Stars.  8vo. Shanghai, 1878
Taisnier (Joannes):  Astrologiæ Iudiciariæ ysagogica et totivs divinatricis artis encomia, cum nonnullis Habrahami Iudæi & Lucæ Gaurici dictis.  8vo. Coloniæ, 1559
Tait (Peter Guthrie): Natural Philosophy, see Thomson and Tait.
Tasmania, Royal Society:  —: Papers and Proceedings of the Royal Society of Van Diemen's Land. Vol. 2, Part 2, and Vol. 3, Part 2 (and Report for the year 1852).  8vo. Hobart Town, 1853-59
: Monthly Notices of papers and proceedings (and Reports) of the Royal Society of Tasmania, 1863-74.  8vo. Hobart Town, 1864-75
——: Papers and proceedings and report, 1875-81.  8vo. Hobart Town, 1876-82
Tate (Thomas):  The principles of mechanical philosophy applied to industrial mechanics.  8vo. London, 1853
Taylor (Brook):  ——: Method of perspective made easy, both in theory and practice, in two books By Joshua Kirby. Third edition.  2 parts in 1 vol. 4to. London, 1768  ——: New principles of linear perspective. Fourth edition.
Taylor (John):  The great pyramid: why was it built? & who built it?  12mo. London, 1859

Taylor (John and Richard Sheepshanks: Correspondence respecting the Liverpool Observatory (with supplement). Svo. London, 1845 Taylor (Michael): —: A sexage simal table, exhibiting at sight the result of any proportion where the terms do not exceed sixty minutes; also tables of the equation of second difference, and tables for turning the lower denominations of English money, weights and measures into sexagesimal of the higher and vice versa, and the sexagesimal table turned into seconds as far as the roooth column. 4to. London, 1780 —: Tables of logarithms of all numbers from 1 to 101,000, and of the sines and tangents to every second of the quadrant; with a preface and precepts for the explanation and use of the same by Nevil Maskelyne. 4to. London, 1792 Taylor (Richard): Scientific memoirs, selected from the Transactions of foreign Academies of science and learned societies, and from foreign journals. Vol. 1, Vol. 2, Part 5, 6. Svo. London, 1837-39 Taylor (Thomas Glanville), see Madras Observatory; Dodabetta. Taylor (Thomas Glanville) and J. Caldecott: \*Observations on the direction and intensity of the terrestrial 8vo. Madras, 1839 magnetic force in Southern India. Teale (James): A dynamical theory of the universe. 8vo. Manchester, 1868 Tebbutt (John): --: Meteorological Observations made at the private Observatory . . . . Windsor, New South Wales, in the years fol. Sydney, 1868-82 1863-81. --: \*On the progress and present state of astronomical science in New South Wales. 8vo. Sydney [1870] - : \*On a new and remarkable variable star in the constellation 8vo. Sydney, 1877 Ara. - : \*Note on the opposition-magnitudes of Uranus and Jupiter. Svo. Sydney, 1880 ---: \*On the orbit-elements of Comet I, 1880 (Great Southern Svo. Sydney, 1880 - : \*On the longitude of the Sydney Observatory. Svo. Sydney, 1880 Svo. Sydney, 1881 - : \*On the variable star R. Carina. Svo. Sydney, 1881 —: \*On Comet II, 1881. 8vo. Sydney, 1881 --: \*On the star Lacaille 21.45.

Telescope (Gregorian): Das älteste Gregoryanische Spiegelteleskop datirt nicht vom Jahre 1674, sondern vom Jahre 1670.

Svo. London, 1872-79

Telegraphic Journal, Vol. 1=7.

Téloscopes dioptriques, depuis Galilée jusqu'à ce jour.

[Templeman (Joseph)]:
Table showing the mean temperature at St. Johu's, Newfoundland (1834-37). [single sheet]
Tennant (James F.):
——: Total eclipses [with special reference to the eclipse of 1868].  8vo. Calcutta.
——: *On the eclipse of August 1868. Svo. London, 1867 ——: An account of the metrical system of weights and measures,
with an attempt to explain its advantages, and the reasons
for selecting it for India. 8vo. Calcutta, 1870  —: Report on the preparations for and observations of the
Transit of Venus, as seen at Roorkee and Lahore, on
December 8, 1874. 4to. Calcutta, 1877 —: *Account of the verification of some standard weights,
with considerations on standard weights in general.
Terby (François):
: *Études sur la planète Mars. [10 papers from Bulletin
de l'Académie de Bruxelles.'] 8vo. Bruxelles, 1873-80: *Observations de Jupiter et de Mars, faites à Louvain pen-
dant l'opposition de ces planètes en 1873.
8vo. Bruxelles, 1873 ——: *Configuration des taches de la Planète Mars à la fin du
dix-huitième siècle, d'après les dessins inédits de J. H. Schroeter. 8vo. Bruxelles, 1873
: *Areographische Fragmente. Manuscrit et dessins origi-
naux et inédits de l'astronome J. H. Schroeter, de Lilienthal. 4to. Bruxelles, 1873
: *Remarques sur l'aspect de la planète Jupiter pendant son
opposition en 1874, et sur le passage des satellites II et III et de leurs ombres pendant la soirée du 25 Mars.
8vo. Bruxelles, 1874 ——: *Sur l'aspect de l'ombre du 2 <sup>me</sup> satellite de Jupiter le 25
Mars 1874. 8vo. Bruxelles, 1875
: *Aréographie ou étude comparative des observations faites sur l'aspect physique de la planète Mars depuis Fontana
(1636) jusqu'a nos jours (1873). 4to. Bruxelles, 1875
: *Observations des Comètès $b$ et $c$ de 1881 faites à Louvain. 8vo. Bruxelles, 1881
: *Note sur l'Aurore Boréale du 2 Octobre 1882.
8vo. Bruxelles, 1882 ——: *Note sur l'Aurore Boréale du 17 Novembre 1882.
8vo. Bruxelles, 1882: *Aspect de la grande comète de 1882 observée à
Louvain. (Notice 1-3.) Svo. Bruxelles, 1882-83
: *Observations de la Lumière Zodiacale et d'un petit bolide, à Louvain. Svo. Bruxelles, 1883
: *Sur l'existence et sur la cause d'une périodicité mensuelle
des Aurores Boréales. 8vo. Bruxelles, 1883 Tessan (U. de):
Physique du voyage de la Vénus pendant les années 1836-39.
5 vols. Paris, 1842–44

Teyler (Musée):

—: Archives, Vol. 1-5. 8vo. Haarlem, 1868-78

—: Série 2, Part 1–3. 8vo. Haarlem, 1881–82

Thacker (Anthony):

A miscellary of mathematical problems. Vol. 1.

8vo. Birmingham, 1743

Thalén (Tobias Robert):

\*La longitude terrestre déterminée au moyen de signaux galvaniques. 4to. Upsala, 1856

Theodosius Tripolitæ:

Sphæricorum libros tres, Ernestus Nizze recognovit, Latine redditos emendavit, commentariis instruxit, appendicibus et indice auxit.

8vo. Berolini, 1852

### Theon (of Alexandria):

Θεωνος Αλεξανδρεως Υπομνημα εις το πρωτον [και το δευτερον]
 της Πτολεμαιον Μαθηματικης Συνταξεως. Commentaire
 . . . . sur le premier (et le second) livre de la composition mathématique de Ptolémée, traduit pour la première fois du grec en français . . . par M. l'Abbé Halma. [Gr. & Fr.]
 2 vols. 4to. Paris, 1821

Tome I. Première partie des développemens de la trigonométrie sphérique d'Hipparque et de Ptolémée.

2. Seconde partie de la trigonométrie sphérique d'Hipparque et de

Ptolémée [&c.].

---: See also Aratus [&c.] par Halma; Valderus.

Theon (of Smyrna):

Τῶν κατὰ μαθηματικὴν . . . . Eorum, quæ in mathematicis ad Platonis lectionem vtilia sunt, expositio. . . . Opus nunc primum editum, Latina versione, ac notis illustratum ab Ismaele Bvllialdo. 4to. Lutetiæ Parisiorum, 1644

Theophilus (Christianus):

Cometen-Propheten: ein kurtzer doch ausführlicher Bericht, von der Comet-Sternen Natur und Würckung; samt einer Erzehlung aller Cometen und ihrer Geschichten.

4to. Nürnberg, 1665

Thévenot (Arsène):

Biographie de Charles-Eugène Delaunay. 8vo. Troyes, 1878

Thiele (T. N.):

— : Castor. Calcul du mouvement relatif et critique des observations de cette étoile double. [Kjöbenhavns Universitet Festskrifter.] Svo. Kjöbenhavn, 1879

— : Sur la compensation de quelques erreurs quasi-systématiques par la méthode des moindres carrés. 4to. Copenhague, 1880

Thieme (Friedrich Eduard):

Populäre Astronomie. Svo. Plauen, 1853

Thilo (Ludwig):

De tabulis iconographicis quibus maculae solis mensibus anni 1826 sex posterioribus et anni 1827 sex prioribus a viro illustrissimo S. Th. Semmering observatae adumbrantur.

4to. Francofurti ad Menum, 1828

[Thompson, (T. Perronet)]:

Geometry without axioms, or the first book of Euclid's elements, with alterations and familiar notes; with an intercalary book in which the straight line and plane are derived from properties of the sphere, with an appendix, containing notices of methods proposed for getting over the difficulty in the 12th axiom of Euclid. Fourth edition.

8vo. London, 1833

### Thomson (David):

Lunar and horary tables, for new and concise methods of performing the calculations necessary for ascertaining the longitude.

8vo. London, 1824

Thomson (Thomas):

---: History of the Royal Society, from its institution to the end of the eighteenth century.

4to. London, 1812

---: See also Annals of Philosophy.

### Thomson (William):

Mathematical and physical papers. Vol. 1.

8vo. Cambridge, 1882

### Thomson (William) and Peter Guthrie Tait:

Treatise on natural philosophy. New edition. Vol. 1, Part 1, 2. Svo. Cambridge, 1879-83

### Thresher (William):

Astrology. [Title wanting.]

8vo.

# Thümmig (Ludwig Philipp):

Dissertatio physico-mathematica de propagatione luminis per systema planetarium. [Inaugural Dissertation.]

4to. Halæ Magdeburgicæ, 1721

#### Tiarks (John Lewis):

----: \*Report . . . . on his Astronomical Observations for ascertaining the most north-western point of the Lake of the Woods.

8vo. [1829]

---: \*Report on Captain Foster's chronometrical observations in H.M.S. Chanticleer. 8vo.

— : Letter, in explanation of geocentric latitude. fol.

Tides (the), a theory thereof. (By W. B.) 8vo. 1883

#### Tiele (Bernhard):

Nova elementa Fidei planetae, deducta ex observationibus quinque oppositionum annorum 1855–1861. [Inaugural Dissertation.] 4to. Bonnae, 1861

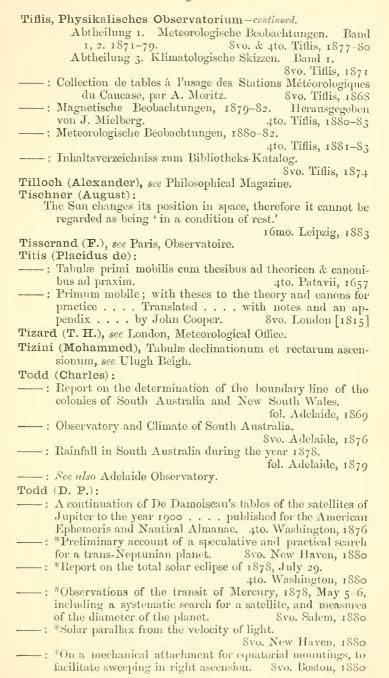
## Tietjen (Friedrich):

De methodis ad orbitas cometarum determinandas adhibitis, Introductio. Dissertatio Inauguralis. 4to. Berolini, 1864

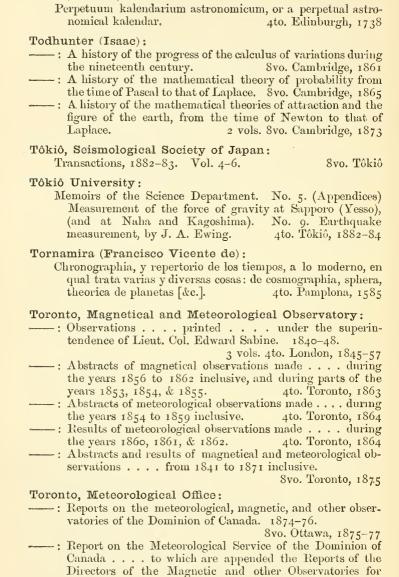
### Tiflis, Physikalisehes Observatorium:

----: Magnetische Inclinationen in Tiflis, 1870-76, bestimmt von H. Kiefer. 4to. Tiflis, 1877

— : Materialien zu einer Klimatologie des Kaukasus, gesammelt und herausgegeben von Λ. Moritz.



Todd (Thomas):



Torricellian Experiment:
Difficiles nugæ, or observations tou

1877-81.

Difficiles nuge, or observations touching the Torricellian experiment, and the weight and spring of air.

8vo. London, 1674

Svo. Ottawa, 1878-83

Toulouse, Académie des Sciences, Inscriptions et Belles- Lettres:
- : Histoire et Mémoires depuis son rétablissement en
1807, pour faire suite à l'Histoire et aux Mémoires de l'an-
cienne Académie, 2 <sup>me</sup> série. 6 vols. 8vo. Toulouse, 1827–43
-: Mémoires. 3 <sup>me</sup> série. 6 vols. 8vo. Toulouse, 1844-50
4 <sup>me</sup> série. 6 vols. 8vo. Toulouse, 1851–56
5 <sup>me</sup> série. 6 vols. 8vo. Toulouse, 1857–62
5 we serie. 6 vois. 8vo. Tottlouse, 1057-02
6 vols. 8vo. Toulouse, 1863–68
7 <sup>me</sup> série. 10 vols. 8vo. Toulouse, 1869–78
8 <sup>me</sup> série. Tome 1–5. 8vo. Toulouse, 1879–83
: Table Alphabétique des matières contennes dans les seize
premiers tomes des Mémoires. 8vo. Toulouse, 1854 —: Table Alphabétique des matières 4 <sup>me</sup> et 5 <sup>me</sup> série.
— : Table Alphabétique des matières 4 me et 5 me sèrie.
8vo. Toulouse, 1854
— : Table Alphabétique des matières 7 <sup>me</sup> série.
8vo. Toulouse, 1880
: Annuaire, 1877-83. 12mo. Toulouse
Toulouse, Observatoire:
-: Annales par F. Petit. Tome 1. 4to. Toulouse, 1863
-: Observatoire astronomique, magnétique, et météorologique
Travaux exécutés 1873-1878, sous la direction de
To Wissenson Land Life you D. Deilland Tomo Y
F. Tisserand publiés par B. Baillaud. Tome 1.
Paris, 1880
Tisserand (F.): Orbite du Sme satellite de Saturne; Mouvement des
apsides des satellites de Saturne; Anneau de Saturne.
apsides des satellites de Saturne; Anneau de Saturne. Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.
Perrotin (J.): Théorie de Vesta : Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry): : *How to handle lunars. Svo. London
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry): : *How to handle lunars. Svo. London: A method for rating chronometers by lunars, containing a
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars. Svo. London —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry): : *How to handle lunars. Svo. London : A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance. Svo. London, 1856 : See also London, Meteorological Office.
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars. Svo. London —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance. Svo. London, 1856 —: See also London, Meteorological Office.  Trafford (F. W. C.): —: Amphiorama, on la vue du monde. Svo. Zurich, 1874
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  — : *How to handle lunars. Svo. London — : A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance. Svo. London, 1856 — : See also London, Meteorological Office.  Trafford (F. W. C.): — : Amphiorama, on la vue du monde. Svo. Zurich, 1874 — : Ditto. Svo. Zurich, 1875
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiaeale, &c.  Toynbee (Henry):  — : *How to handle lunars. Svo. London  — : A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance. Svo. London, 1856  — : See also London, Meteorological Office.  Trafford (F. W. C.):  — : Amphiorama, on la vue du monde. Svo. Zurich, 1874  — : Ditto. Svo. Lausanne, 1875  — : Ditto. Svo. Lausanne, 1877  — : Souvenir de l'amphiorama, on la vue du monde pendant
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars. Svo. London —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance. Svo. London, 1856 —: See also London, Meteorological Office.  Trafford (F. W. C.): —: Amphiorama, on la vue du monde. Svo. Zurich, 1874 —: Ditto. Svo. Lausanne, 1875 —: Ditto. Svo. Lausanne, 1877 —: Sonvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète. Svo. Zurich, 1880
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  Svo. London  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  Svo. London, 1856  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  Svo. Zurich, 1874  Svo. Lausanne, 1875  —: Ditto.  Svo. Lausanne, 1875  Svo. Lausanne, 1877  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1880  Trail (William):
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1875  Svo. Lausanne, 1875  Svo. Lausanne, 1875  Svo. Zurich, 1880  Trail (William):  Account of the life and writings of Robert Simson, M.D., late
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1875  Svo. Lausanne, 1877  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1880  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1875  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1880  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  4to. Bath, 1812
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  Svo. London —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  Svo. London, 1856 —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  Svo. Zurich, 1874 —: Ditto.  Svo. Lausanne, 1875 —: Ditto.  Svo. Lausanne, 1877 —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1880  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  4to. Bath, 1812
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  ———————————————————————————————————
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  4to. Bath, 1812  Trémaux (P.):  Principe universel du monvement et des actions de la matière résultant de la déconverte de cette loi générale: la force vive
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  Svo. London —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  Svo. London, 1856 —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  Svo. Zurich, 1874 —: Ditto.  Svo. Lausanne, 1877 —: Ditto.  Svo. Lausanne, 1877 —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Svo. Zurich, 1880  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  4to. Bath, 1812  Trémaux (P.):  Principe universel du mouvement et des actions de la matière résultant de la déconverte de cette loi générale: la force vive se transmet mieuxe entre corps semblables qu'entre corps
Perrotin (J.): Théorie de Vesta: Observations des satellites de Jupiter et de Saturne, Taches de Soleil, Lumière zodiacale, &c.  Toynbee (Henry):  —: *How to handle lunars.  —: A method for rating chronometers by lunars, containing a few practical hints on lunars, on the best means of employing the results, and on the state of the sextant used for measuring the distance.  —: See also London, Meteorological Office.  Trafford (F. W. C.):  —: Amphiorama, on la vue du monde.  —: Ditto.  —: Ditto.  —: Ditto.  —: Ditto.  —: Souvenir de l'amphiorama, on la vue du monde pendant son passage dans une comète.  Trail (William):  Account of the life and writings of Robert Simson, M.D., late Professor of Mathematics in the University of Glasgow.  4to. Bath, 1812  Trémaux (P.):  Principe universel du monvement et des actions de la matière résultant de la déconverte de cette loi générale: la force vive

Tresca (Henri), see Loewy et Tresca. Tresenreuter (Christoph Friedrich): Dissertatio physico-astronomica de inacquali claritate lucis diurnae in terra et planetis. 4to. Altorfii, 1729 Trettenero (Virgilio), see Santini. Trevandrum Observatory: ---: An Astronomical Ephemeris for the years 1838-40, adapted to the meridian of the Observatory at Trevandrum. 8vo. Trevandrum, 1838-39 ---: Description of an observatory established at Trevandrum by . . . . the Rajah of Travancore. By John Caldecott. 4to. London, 1839 ---: Report on the Observatories of His Highness the Rajah of Travancore, at Trevandrum, and on the Augustier Peak of the Western Ghats. By J. A. Broun. 8vo. Trevandrum, 1857 ---: Observations of magnetic declination made at Trevandrum and Augustia Malley . . . . in the years 1852 to 1869, being Trevandrum Magnetical Observations, Vol. 1. Discussed and edited by J. A. Broun. 4to. London, 1874 Tromholt (Sophus): \*Sur les périodes de l'aurore boréale (d'après des observations faites à Godthaab en Groenland) [French and Danish]. 4to. Copenhague, 1882 Troughton's Reflecting Circle (directions for observing with). 8vo. London, n.d. Trouvelot (Leopold): ---: \*On the veiled Solar Spots. 8vo. Boston, 1876 ---: \*On some physical observations of the Planet Saturn. 8vo. Boston, 1876 --: \*The Moon's Zodiacal Light. Undulations observed in the tail of Coggia's Comet, 1874. Sudden extinction of the light of a solar protuberance. On Saturn's rings. 8vo. Boston, 1878 ---: \*Spectres fugitifs observés près du limbe solaire. 8vo. Paris, 1880 ---: \*Observations on Jupiter. 8vo. Boston, 1881 Trowbridge (David): \*On the atmospheres of the Sun and planets. Svo. Philadelphia, 1877 Truth in Extremis: A plea against the murder of science by the gold-poison. By a searcher. 8vo. Oxford, 1876 Tschermak (Gustav): - : Die mikroskopische Beschaffenheit der Meteoriten, erläutert durch photographische Abbildungen. fol. Stuttgart, 1883

Observations of shooting stars in the years 1869, 1870, 1871. Svo. London, 1874

- : See also Buchner und Tschermak.

Tupman (George Lyon):

Tupman (George Lyon)—continued.
: *On the great meteors of 1875: September 3, September 7,
and September 14. 8vo. London, 1876
: *The meteors of 1877, Nov. 23. 8vo. London, 1878
Turin, Reale Accademia delle Scienze:
: Miscellanea philosophico-mathematica Societatis Privatae
Taurinensis. Tomus 1. 4to. Augustæ Taurinorum, 1759  —: Mélanges de philosophie et de mathématique de la Société
Royale de Turin, 1760-73. 4 vols. 4to. Turin.
—— : Mémoires de l'Académie Royale des Sciences, 1784-1800. 6 vols. 4to. Turin, 1786-1801
: Mémoires de l'Académie (Impériale) des Sciences, litté-
rature et beaux-arts de Turin :
Sciences physiques et mathématiques, an X [1802]-1812.
5 vols. 4to. Turin, 1804–13 Littérature et beaux-arts, an X [1802]–1812.
5 vols. 4to. Turin, 1803–13
: Mémoires de l'Académie Royale des Sciences de Turin,
1813-1814. 4to. Turin, 1816
: Memorie della R. Accademia delle Scienze di Torino. Tomo
23-40. 4to. Torino, 1818-38
—: Serie seconda. Tomo 1–35. 4to. Torino, 1839–84
: Atti, 1865-84. Vol. 1-19. 8vo. Torino, 1866-83
: Notizia Storica dei lavori fatti dalla classe di scienze fisiche
e matematiche negli anni 1864 e 1865, dal A. Sobrero.
8vo. Torino, 1869 : Annuario per l' anno 1877–78. Anno 1.
8vo. Torino, 1877
: Atlante di carte celesti, contenenti le 634 stelle principali
visibili alla latitudine boreale di 45° e catalogo delle
stelle per l'anno 1880. obl. fol. n.d.
: Il primo secolo della R. Accademia delle Scienze di Torino:
notizie storiche e bibliografiche (1783–1883).
4to. Torino, 1883
Turin, R. Osservatorio della R. Università:
: Observations Astronomiques faites en 1822-25
précèdées d'un mémoire sur les réfractions astronomiques par J. Plana. 4to. Turin, 1828
: Bolletino Meteorologico ed Astronomico. Anno 5-17,
1868-82. oblong 4to, Torino
Turner (John):
Mathematical exercises. No. 1-6.
8vo. London and Wrexham, 1750-52
Turner (Rev):
The Heavens survey'd, and the true System of the Universe
delineated, so as to form a curious Astronomical Instrument:
exhibiting the number, order, periods, aphelions, perihelions,
nodes, &c., of all the Primary Planets by inspection.
fol. London, 1783

fol. London, 1783

Turnor (Edmund):

Collections for the history of the town and Soke of Grantham. Containing authentic memoirs of Sir Isaac Newton, now first published from the original MSS. in the possession of the Earl of Portsmouth. 4to. London, 1806

Tuttell (Thomas):

A mathematical dictionary, &c. (the description of mathe-2 parts, 8vo. London, 1701 matical instruments).

Twining (Alexander C.):

\*Investigations respecting the Phenomena of Meteoric Rings, as affected by the Earth. 8vo. New Haven, 1862

Twysden (John):

--: The use of the general planisphere, called the analemma (the planetary instrument, and the nocturnal).

3 parts in 1 vol. 4to. London, 1685 ---: See also Foster (Samuel).

Tycho Brahe, see Brahe.

Tyndall (John):

—: \*On the physical basis of solar chemistry.

8vo. London [1861]

—: Heat a mode of motion. Fifth edition. 8vo. London, 1875

Uhlemann (Max):

Grundzüge der Astronomie und Astrologie der Alten, besonders der Aegypter. 8vo. Leipzig, 1857

Ule (Otto):

Das Weltall. Beschreibung und Geschichte des Kosmos im Entwicklungskampfe der Natur . . . Zweite Auflage.

3 vols. 8vo. Halle, 1853

Ulloa (Antonio de): Observaciones astronomicas, see Juan y Ulloa.

Ulugh Beigh:

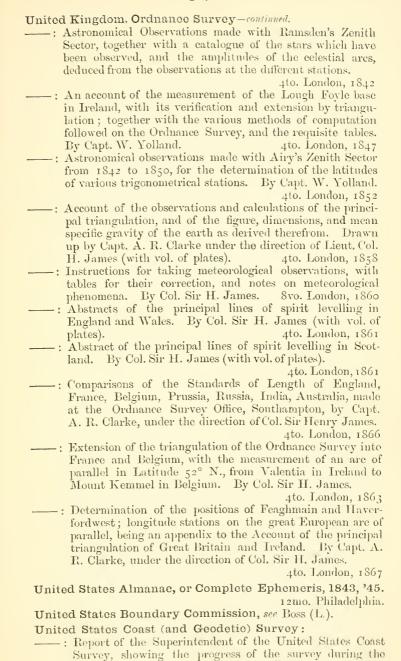
---: Epochæ celebriores, astronomicis, historicis, chronologîs Chataiorum, Syrogræcorum, Arabum, Persarum, Chorasmiorum usitatæ; . . . . publicavit, recensuit, et commentariis illustravit J. Gravius. 4to. Londini, 1650

— : See also Knobel (E. B.).

- : Tabulæ long. ac lat. stellarum fixarum, ex observatione Ulugh Beighi, Tamerlanis magni nepotis . . . jam primum luce ac Latio donavit et commentariis illustravit Thomas Hyde. [Pers. & Lat.] In calce libri accesserunt Mohammedis Tizini tabulæ declinationum et rectarum ascensionum; additur elenchus nominum stellarum. [Arabic 2 parts in 1 vol. Oxonii, 1665

United Kingdom, Ordnance Survey:

- : An account of the operations carried on for accomplishing a trigonometrical survey of England and Wales; from the commencement, in the year 1784 (to 1809). By W. Mudge, I. Dalby, and T. Colby. 3 vols. 4to. London, 1799-1811



years 1853-77.

4to. Washington, 1854 80

TInited	States Coast	(and Geodetic)	Survey-continued.
omitea	States Coast	cand Greodenc	) Survey—contenued.

- : Report of the Superintendent of the U.S. Coast and Geodetic Survey, showing the progress of the work during the years 1878-82.

4to. Washington, 1881-83

Appendix to vol. for 1860 contains

Reports of Observations of solar eclipse, July 1860. Alexander & Gilliss.

- - and general index of professional and scientific papers in Reports for 1851-70.
  - ,, ,, 1873. List of stars for observations of latitude; Errata in Heis's catalogue of stars.
  - ", 1875. Report on Transit of Venus Expeditions, 1874.
    ", 1876. Catalogue of stars for observations of latitude.
  - ,, , 1878. Observations of Transit of Mercury, May 1878. ,, 1881. Ellipticity of the earth from pendulum experiments, &c. C. S. Peirce.
  - ", ", "1882. Total eclipse of Jan. 1880 (Davidson). New reduction of Lacaille's Observations of Fundamental Stars (Powalky).
- : Report on the history and progress of the American Coast Survey up to the year 1858. 8vo.
- : Standard mean Right-Ascensions of circumpolar and time stars.

  4to. Washington, 1862
- ----: \*Methods, discussions and results. Meteorological Researches for the use of the Coast Pilot. (By William Ferrel.) Part 1-3. 4to. Washington, 1877-82

### United States Geographical Surveys:

Report upon United States Geographical Surveys west of the one-hundredth meridian, in charge of Lieut. Geo. M. Wheeler. Vol. 2, Astronomy and barometric Hypsometry.

4to. Washington, 1877

# United States Geological Survey:

Meteorological observations during the year 1872, in Utah, Idaho, and Montana. 8vo. Washington, 1873

# United States Naval Astronomical Expedition:

- ——: To the Southern hemisphere during the years 1849, 1850, 1851, 1852, Lieut. J. M. Gilliss, Superintendent. Vol. 1-3, 6. 4to. Washington, 1855-56
- ----: A catalogue of 1963 stars. . together with a catalogue of 290 double stars. The whole from observations made at Santiago, Chili, during the years 1850–1852.

4to. Washington, 1870

Universal System (the), or mechanical cause of all the appearances and movements of the visible heavens . . . . with a dissertation on Comets: . . . likewise an attempt to prove what it is that moves the Sun round its axis.

8vo. London, 1779

Upsala Kongl. Universitet: Årsskrift. 1861-70.

8vo. Upsala.

Thurst Wangl Waterskong Conjetet
Upsala, Kongl. Vetenskaps-Societet:
-: Nova Acta Regiæ Societatis Scientiarum. Series 3, Vol.
1-11. 4to. Upsalie, 1855-83
: Nova Acta. Volumen extra ordinem editum. (In memo-
riam quattuor seculorum ab Universitate Upsaliensi perae-
torum Regia Societas Scientiarum Upsaliensis.)
4to. Upsalie, 1877
— : Årsskrift. Årgången 1, 2. 8vo. Upsala, 1860-61
Upsala, K. Universitäts-Sternwarte:
: Refractors-Beobachtungen vom Februar 1862 bis
Januar 1864. Svo. Upsala, 1864
: Observations météorologiques faites pendant les
années 1855-62. 4to. Upsal, 1866
: Observations météorologiques horaires, exécutées par une
Société d'Étudiants 1865-68. Dirigées et publiées
par R. Rubenson. 4to. Upsal, 1877
- : Bulletin météorologique mensuel, 1869-75. Vol. 1-7. 4to. Upsal, 1871-76
Uranus; oder tägliche, für Jedermann fassliche Uebersicht aller
Himmelserscheinungen. Herausg. von P. H. L. von
Boguslawski. 1846, '47: 1849, Part 1.
8vo. Glogau und Breslau, 1845–48
Ure (Andrew):  A slight sketch of, reprinted from 'The Times' and various
other Periodicals. 12mo. London, 1875
Ursinus [Ursin] (Georg Frederik Krüger):
: De Eclipsi Solari die vu Septembris MDCCCXX apparitura
secundum methodum geometriæ analyticæ tractata disser-
tatio. 4to. Hafnie, 1820
-: Logarithmi vi Decimalium scilicet numerorum ab i ad
100,000 et sinuum et tangentium ad 10", quibus additi sunt
varii logarithmi et numeri sæpius in mathesi adhibiti.
8vo. Hafnie, 1827
Useful Knowledge Society, see Society for the Diffusion of
Useful Knowledge.
Utrecht, Observatoire Astronomique Sonnenburg:
: Recherches astronomiques publiées par M. Hoek.  1. De l'influence des mouvements de la terre sur les phé-
nomènes fondamentaux de l'optique 11. Perturbations
de Proserpine, dépendantes de la première puissance de la
masse perturbatrice de Jupiter. Livraison 1, 2.
4to. La Haye, 1861–64
: Recherches astronomiques, addition à la première livraison :
Recherches sur la quantité d'éther contenue dans les
liquides, par M. Hoek et A. C. Oudemans. 4to. La Haye, 1864
Uylenbroek (Pieter Johannes):

Uzielli (Gustavo): Svo. \*G. B. Donati. в ь

Oratio de Astronomiae conditione apud Arabes, aliasque medii aevi gentes orientales. 4to. Lugduni Batavorum, 1832

### Valderus (J.) [and others]:

Sphæræ atqve astrorvm cælestium ratio natura & motus. (J. Ziegler, de solidæ sphæræ constructione: Proclus, de sphæra, sive globo cælesti, scholijs eiusdem Ziegleri explicatus: Hemicyclium Berosi: Aratus, de siderum natura & motu: . . . cum commentarijs Theonis Alexandrini: Ptolemæus & Jordanus, planisphærium. 8vo. [Basileæ,1536]

### Valentiner (Wilhelm):

Determinatio orbitae Cometae v anni MDCCCLXIII. Dissertatio inauguralis. . . . 4to. Berolini, 1869

## Vállas (Antal):

Felsöbb Egyenletek egy Ismeretlennel. Part 1.

8vo. Budán, 1842

### Valz (Benjamin):

\*Recherches sur le mode de formation des queues de comètes. 8vo. Genève, 1831

### Vapereau (G.):

Dictionnaire universel des contemporains, contenant toutes les personnes notables de la France et des pays étrangers.

8vo. Paris, 1858

## Vecchietti (Hieronymus):

De anno primitivo ab exordio mundi ad annum Julianum accommodato, et de sacrorum temporum ratione libri octo.

fol. Augustae Vindelicorum, 1621

## Vega (Georg von):

——: Thesaurus logarithmorum completus, ex arithmetica, logarithmica, et ex trigonometria artificiali Adriani Vlacci collectus, plurimis erroribus purgatus, in novum ordinem redactus. [Lat. & German.] fol. Lipsiae, 1794

: Manuale logarithmico-trigonometricum matheseos studiosorum commodo in minorum Vlaccii, Wolfii, aliarumque hujus generis tabularum logarithmico-trigonometricarum mendis passim quam plurimis scatentium locum substitutum. [Lat. & Ger.] 4to. Lipsiae, 1820

----: Logarithmisch-trigonometrisches Handbuch. Vierzigste Auflage, . . . . bearbeitet von Dr. C. Bremiker. 8vo. Berlin, 1856

# Venturi (Giambattista):

Experimental enquiries concerning the principle of the lateral communication of motion in fluids. Applied to the explanation of various hydraulic phenomena. Translated [by W. Nicholson].

8vo. London, 1799

# Venus (Transit of), 1874:

Papers relating to the Transit of Venus in 1874, prepared under the direction of the Commission authorised by Congress.

4to. Washington, 1872–76

# Venus (Transit of), 1882:

Instructions to observers. [Issued by the British Transit of Venus Committee.] Svo. London

Vernon (George Venables):
-: *On the irregular oscillations of the barometer at Man-
chester. 8vo. Manchester, 1861
-: *On the irregular barometric oscillations at Geneva and on
the Great St. Bernard, and their relations to the mean
temperature and the fall of rain. Svo. London, 1862
*On the number of days on relief wir fills
-: *On the number of days on which rain falls annually at
London. 8vo. London, 1864
-: *On the direction of the wind at Manchester during the
years 1849-61, at 8 A.M. Svo. London, 1864
: *On the meteorology of scarlatina. Svo.
: See also Heap and Vernon; Ransome and Vernon.
Veteres Mathematici:
Veterum mathematicorum Athenæi, Apollodori, Philonis,
Bitonis, Heronis, et aliorum Opera, Grace et Latine pleraque
nunc primum edita. fol. Parisiis, 1693
Vicaire (E.):
: *Sur la théorie des taches et sur le noyau obscur du soleil.
4to. Paris, 1873
: *Sur la constitution du soleil et la théorie des taches. [2
mémoires.] 4to. Paris, 1873
: *Sur la constitution physique du solcil. Réponse aux cri-
tiques de M. Faye. 4to. Paris, 1873
-: *Observations sur la théorie des cyclones solaires. [2 mé-
moires. 4to. Paris, 1873
: *Sur la loi de l'attraction astronomique sur les masses des
divers corps du système solaire, et en particulier sur la
masse et sur la durée du soleil. 4to. Paris, 1874
Victoria, Royal Society:
-: Transactions of the Philosophical Society of Victoria, 1854-
: Transactions of the Enfosophical Society of Victoria, 1854-
55. Vol. 1. 8vo. Melbourne, 1855
-: Transactions of the Philosophical Institute of Victoria,
1855-60. Vol. 1-4. 8vo. Melbourne, 1857-60
: Transactions and Proceedings of the Royal Society of Vic-
toria, 1860-82. Vol. 5-19. Svo. Melbourne, 1860-83
Vidal (Adriano Augusto de Pina):
— : Curso de Meteorologia. Svo. Lisboa, 1869
: Tratado elementar de optica. 8vo. Lisboa, 1874
Winner Consilied of des Turnede des Notesseines al ef
Vienna, Gesellschatt der Freunde der Naturwissenschal-
Vienna, Gesellschaft der Freunde der Naturwissenschaften:
ten:
ten:: Berichte über die Mittheilungen gesammelt und
ten:: Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847 : Naturwissenschaftliche Abhandlungen, heraus-
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847 : Naturwissenschaftliche Abhandlungen, herausgegeben von W. Haidinger. Band 1. 4to. Wien, 1847.
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847 : Naturwissenschaftliche Abhandlungen, herausgegeben von W. Haidinger. Band 1. 4to. Wien, 1847.  Vienna, Kaiserliche Akademie der Wissonschaften:
ten: : Berichte über die Mittheilungen gesammelt und herausgegeben von W. Haidinger. Band 1, 2.  Svo. Wien, 1847 : Naturwissenschaftliche Abhandlungen, herausgegeben von W. Haidinger. Band 1. 4to. Wien, 1847.  Vienna, Kaiserliche Akademie der Wissonschaften: : Denkschriften Mathematisch-naturwissenschaftliche
ten:
ten:
ten:

Vienna, Kaiserliche Akademie der Wissenschaften-continued.
: Sitzungsberichte der mathematisch-naturwissenschaftlichen
Classe, 1849-60. Band 2-12. Svo. Wien, 1849-61
Classe, 1849-60. Band 2-42. Svo. Wien, 1849-61 : Abtheilung 2 (Mathematik, Physik, Chemie, Mechanik,
Meteorologie, Astronomie), 1861–83. Band 43–86.
8vo. Wien, 1861–83
: Register zu den ersten 10 Bänden. 8vo. Wien, 1854
-: ,, ,, zweiten 10 Bänden. Svo. Wien, 1856
—: " " Bänden 21–30. Svo. Wien, 1859
—: ,, ,, 31–42. 8vo. Wien, 1862
—: " " " 43–50. 8vo. Wien, 1865
: ,, ,, 51-60. 8vo. Wien, 1870
—: ,, 61-64. 8vo. Wien, 1872
: Feierliche Sitzung, 1859, '61. 8vo. Wien
: Almanach, Jahrgang 5, 6, 8, 9. 1855-59. 8vo. Wien
: Circular, No. 23-50. Svo. Wien, 1877-83
Vienna, K. K. Central-Anstalt für Meteorologie und Erd-
magnetismus:
: Jahrbücher von Karl Kreil, 1848-56. Band 1-8.
4to. Wien, 1854–61
—: Übersichten der Witterung in Österreich und einigen aus-
wärtigen Stationen im Jahre 1860. 4to. Wien, 1861
Vienna, K. K. Sternwarte:
-: Annalen von J. J. von Littrow (und C. L. von
T'the Annabel Von J. J. Von Lattrow (and C. Li. Von
Littrow). Theil 1-20 (in 10 vols.) fol. Wien, 1821-40
— : Ditto. Herausgegeben von C. L. von Littrow. Neue Folge.
— : Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51
— : Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1–14. 4to. Wien, 1841–51 Vol. 4–12. Storia Celeste del R. Osservatorio di Palermo dal
— : Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1–14. 4to. Wien, 1841–51 Vol. 4–12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.
— : Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1–14. 4to. Wien, 1841–51 Vol. 4–12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss).</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1–14. 4to. Wien, 1841–51</li> <li>Vol. 4–12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1–29. 8vo. Wien, 1851–80</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss).</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1–14. 4to. Wien, 1841–51</li> <li>Vol. 4–12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1–29. 8vo. Wien, 1851–80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842°0, von W. Oeltzen.</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842.0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. Svo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842°0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Horn-</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842.0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> </ul>
<ul> <li>: Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51 Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>: Ditto. Herausgegeben von Carl von Littrow (und E.Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80 Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842°0, von W. Oeltzen.</li> <li>: Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>: Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> </ul>
<ul> <li>: Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>: Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842°0, von W. Oeltzen.</li> <li>: Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>: Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>: Uebersicht der meteorologischen Beobachtungen von C.</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842°0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1830-50. 4to. Wien</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Beobachtungen, 1829-33, 1836-45, re-</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842·0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855</li> <li> herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Bcobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek.</li> <li>4to. Wien</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E.Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Ilygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842·0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien Hygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow.</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842·0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Beobachtungen, 1829-33, 1836-45, redueirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow. 8vo. 1837</li> <li>*Resultate der Beobachtungen am Meridian-Kreise, zusam</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E.Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Ilygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51 Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. Svo. Wien, 1851-80 Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Beobachtungen, 1829-33, 1836-45, redueirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow. 8vo. 1837</li> <li>*Resultate der Beobachtungen am Meridian-Kreise, zusam mengestellt von E. Weiss. 8vo. Wien, 1871</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E.Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow. 8vo. 1837</li> <li>*Resultate der Beobachtungen am Meridian-Kreise, zusam mengestellt von E. Weiss. 8vo. Wien, 1871</li> <li>Vienna, österreichische Kriegsmarine:</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E. Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842:0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien Hygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow. 8vo. 1837</li> <li>*Resultate der Beobachtungen am Meridian-Kreise, zusam mengestellt von E. Weiss. 8vo. Wien, 1871</li> <li>Vienna, österreichische Kriegsmarine: Almanach, 1863-65. Jahrg. 2-4. 8vo. Wien</li> </ul>
<ul> <li>Ditto. Herausgegeben von C. L. von Littrow. Neue Folge. Band 1-14. 4to. Wien, 1841-51</li> <li>Vol. 4-12. Storia Celeste del R. Osservatorio di Palermo dal 1792 al 1813.</li> <li>Ditto. Herausgegeben von Carl von Littrow (und E.Weiss). Dritte Folge. Band 1-29. 8vo. Wien, 1851-80</li> <li>Vol. 1, 2. Argelander's Zonen-Beobachtungen vom + 45° bis + 80° Decl. in mittleren Positionen für 1842'0, von W. Oeltzen.</li> <li>Meteorologische Beobachtungen von 1775 bis 1855 herausgegeben von Carl von Littrow und Carl Hornstein (und Edmund Weiss). Band 1-5. 8vo. Wien, 1860-66</li> <li>Meteorologische Beobachtungen, 1839-50. 4to. Wien</li> <li>Uebersicht der meteorologischen Beobachtungen von C. Jelinek (und A. Kunes), 1839-50. 4to. Wien</li> <li>Hygrometer-Beobachtungen, 1829-33, 1836-45, reducirt von C. Jelinek. 4to. Wien</li> <li>Hülfs-Tafeln zusammengestellt im Jahre 1837 von C. L. v. Littrow. 8vo. 1837</li> <li>*Resultate der Beobachtungen am Meridian-Kreise, zusam mengestellt von E. Weiss. 8vo. Wien, 1871</li> <li>Vienna, österreichische Kriegsmarine:</li> </ul>

---: Canon mathematicvs sev ad triangvla cum adpendicibus.

fol. Lutetiæ, 1579

Vieta (Franciscus)—continued.
: Opera mathematica, in unum Volumen congesta ac recog-
nita, operâ atque studio Francisci à Schooten.
fol. Lugduni Batavorvm, 1646
Vige[nè]re (Blaise de):
Traicté des Comètes, ou estoilles chevelues, apparoissantes
extraordinairement au ciel; avec leurs causes & effects.
8vo. Paris, 1578
Vignoles (Charles):
Observations to accompany the map of the shadow-path thrown
by the total eclipse of the Sun on the 18th July, 1860,
across the north-eastern part of Spain. 8vo. London, 1860
Villarceau (Antoine François Joseph Yvon):
: *Procédé pour calculer la masse et les éléments de l'orbite
d'une planète perturbatrice inconnue (Extrait).
4to. Paris, 1848
: *Mémoires et notes sur les étoiles doubles et la détermina-
tion des orbites des planètes. 8vo. Paris, 1850
: *Théorie analytique de l'inégalité de lumière des étoiles
doubles. (Extrait par l'auteur.) 4to. Paris, 1852
- : *Troisième mémoire sur les étoiles doubles. (Extrait par
l'auteur.) 4to. Paris, 1852
— : *Théorie analytique du gyroscope de M. L. Foucault.
8vo. Paris, 1855
: *Détermination des orbites des planètes et des comètes.
4to. Paris, 1857
: *Prochain retour de la comète découverte par M. D'Arrest
en 1851. 4to. Paris, 1857
: *Exposé du système des observations et de la détermina-
tion des éléments de leur réduction. 4to. Paris, 1860 — : *Éphémérides pour la recherche de la comète périodique
de d'Arrest, à son prochain retour en 1863 et 1864.
4to. Paris, 1862
: *Recherches sur le mouvement et la compensation des
chronomètres. 4to, Paris, 1862
: *Étude du mouvement de rotation de la lunette méridienne.
4to. Paris, 1863
: *Nouveau théorème sur les attractions locales.
4to. Paris, 1868
: *Discussion relative au transfert de l'Observatoire Impérial
de Paris. 4to. Paris, 1869
: *Nouvelle détermination de la vraie figure de la terre, ou
de la surface de niveau, n'exigeant pas l'emploi des nivelle-
ments proprement dits. 4to. Paris, 1871
: *Théorie du pendule simple, à oscillations coniques, en
ayant égard à la rotation de la terre. 4to. Paris, 1879
: *Application de la théorie des sinus des ordres supérieurs à
l'intégration des équations différentielles linéaires.
4to. Paris, 1880
: *Mécanique céleste. Exposé des méthodes de Wronski et
composantes des forces perturbatrices suivant les axes
mobiles

Villarceau (Antoine François Joseph Yvon)—continued.
: *Remarques à l'occasion du mémoire de MM. Loewy et Périgaud sur la flexion des lunettes. 4to. Paris, 1881
Périgaud sur la flexion des lunettes. 4to. Paris, 1881 : *Théorie de la flexion plane des solides, et conséquences
relatives, tant à la construction des lunettes astronomiques,
qu'à la réglementation de ces appareils, pour les affranchir
des déviations de l'axe optique produites par la flexion.
4to. Paris, 1881 : *Mécanique céleste. Essai philosophique sur la science de
l'ordre (méthode ainsi nommée par son auteur).
4to. Paris, 1882
—: See also Paris, Observatoire.
Villehuet (Bourdé de):
Le Manœuvrier, ou essai sur la théorie et la pratique des
mouvements du navire et des évolutions navales.
8vo. Paris, 1769
Villeneuve (J. Perny):
Commentaire et discussion de l'Astronome J. P V ,
par un ancien officier de l'État-Major [le C <sup>te</sup> Kostrowicki]. 4to. Vienne, 1861
Vilna, see Wilna.
Vince (Samuel):
—: A treatise on practical astronomy. 4to. Cambridge, 1790—: *A new method of investigating the sums of infinite series.
4to. London, 1791
: The principles of hydrostatics. Vol. 3, Part 2.
Svo. Cambridge, 1796
: A complete system of astronomy.
3 vols. 4to. Cambridge, 1797–1808 ——: The principles of astronomy, designed for the use of students
in the University. 8vo. Cambridge, 1799
: A treatise on plane and spherical trigonometry, with an
introduction, explaining the nature and use of logarithms.
8vo. Cambridge, 1800
: The principles of fluxions, designed for the use of students in the University. Third edition. 8vo. Cambridge, 1805
-: A confutation of Atheism, from the laws and constitution
of the heavenly bodies: in four discourses preached before
the University of Cambridge. Svo. Cambridge, 1807
: The elements of the Conic Sections, adapted to the use of
students in Philosophy. Fourth edition.  8vo. Cambridge, 1810
: A treatise on fluxions. Fifth edition.
8vo. Cambridge, 1818
Vincendon-Dumoulin (A.):
Hydrographie du voyage au Pôle Sud et dans l'Océanie sur
les corvettes l'Astrolabe et la Zélée, exécuté pendant
les années 1837-40, sous le commandement de J. Dumont
d'Urville. 8vo. Paris, 1843

Virgin (C. A.):

Voyage autour du monde sur la frégate Suédoise l'Eugénie, exécuté pendant les années 1851-53, sous le commandement de C. A. Virgin. Observations scientifiques: 3<sup>me</sup> partie. Physique. [French and Swedish. Edited by A. J. Ångström.]

4to. Stockholm, 1858-74

### Visconti (Ferdinando):

Del sistema metrico della Città di Napoli. Svo. Napoli, 1838

Vision (the theory of), or visual language, shewing the immediate presence and providence of a Deity, vindicated and explained.

8vo. London, 1733

#### Viviani (Vincenzio):

— : De Maximis et Minimis, geometrica diuinatio in quintum conicorum Apollonii Pergæi adhuc desideratum . . . . liber primus (et secundus). 2 vols. in 1, fol. Florentiæ, 1659

: La Vita, ed alcune lettere familiari di Galileo Galilei. Svo. Venezia, 1826

Vizagapatam Observatory:

Results of meteorological observations, 1872, '75-77, '79-82. By A. V. Nursingrow. 8vo. Calcutta, 1873-83

### Vlacq (Adrian):

— : Chiliades centum Logarithmorum pro numeris ab unitate ad 100,000. fol. [Goude, 1628?]

---: Arithmetique logaritmetique, ov la construction et vsage d'une table contenant les Logarithmes de tous les Nombres depuis l'Unité jusques à 100000, et d'une avtre table en laquelle sont comprins les Logarithmes des Sinus, Tangentes & Secantes, de tous les Degrez & Minutes du quart du Cercle, selon le Raid de 10,00000,00000 parties.

fol. Goude, 1628

—: Tabvlae sinvvm, tangentivm, et secantivm; logarithmi sinvvm, tangentivm, et nvmerorvm ab vnitate ad 10,000.

sinvvm, tangentivm, et nvmerorvm ab vnitate ad 10,000.

Cvm methodo facilima, illarvm ope, resolvendi omnia
triangvla rectilinea et sphaerica, et plvrimas qvaestiones
astronomicas. Editio nova et emendata a Joh. Jacobo
Hentschio. 8vo. Francofurti et Lipsiae, 1778

## Vogel (Hermann Carl):

 : Beobachtungen von Nebelflecken und Sternhaufen am sechsfüssigen Refractor und zwölffüssigen Acquatoreal der Leipziger Sternwarte ausgeführt.
 Svo. Leipzig, 1867

--: \*Verzeichniss von hundert Nebelflecken, abgeleitet aus Beobachtungen an der Leipziger Sternwarte.

4to. Altona, 1867
——: \*Bahnbestimmung und Ephemeriden der Planeten Antiope

(90) und Aegle (96). 4to. Altona, 1867, 1868 —: \*Bahnbestimmung des Cometen V, 1846. 4to. Altona, 1868

Beobachtungen von Nebelflecken und Sternhaufen deren Declination zwischen 9° 30′ und 15° 30′ gelegen sind. Inaugural-Dissertation. Svo. Jena, 1870

— : \*Resultate spectralanalytischer Untersuchungen an Gestirnen. Svo. Leipzig, 1871

Vogel (Hermann Carl)—continued.
: *Untersuchungen über das Spectrum des Nordlichts.
8vo. Leipzig, 1871
: *Ueber die Absorption der chemisch wirksamen Strahlen
in der Atmosphäre der Sonne. 8vo. Leipzig, 1872
: *Über ein Spectroskop zur Beobachtung lichtschwacher
Sterne, und einige damit ausgeführte Beobachtungen.
8vo. Leipzig, 1873
: Untersuchungen ueber die Spectra der Planeten
Gekrönte Preisschrift. 8vo. Leipzig, 1874
-: *Positionsbestimmungen von Nebelflecken und Sternhaufen
zwischen + 9° 30′ und + 15° 30′ Declination.
4to. Leipzig, 1876 ——: *Untersuchungen über das Spectrum des neuen Sterns im
: *Spectralphotometrische Untersuchungen, insbesondere zur
Bestimmung der Absorption der die Sonne umgebenden
Gashülle. 8vo. Berlin, 1877
: Der Sternhaufen χ Persei beobachtet am 8-zölligen Refractor
der Leipziger Sternwarte in den Jahren 1867 bis 1870.
4to. Leipzig, 1878
: *Notizen über fernere Beobachtungen des neuen Sterns im
Schwan. 8vo. Berlin, 1878
: *Über eine einfache Methode zur Bestimmung der Brenn-
punkte und der Abweichungskreise eines Fernrohrobjectivs
für Strahlen verschiedener Brechbarkeit. 8vo. Berlin, 1880
: *Resultate spectralphotometrischer Untersuchungen.
8vo. Berlin, 1880
: *Vermischte Mittheilungen, betreffend Spectralapparate.
4to. Berlin, 1881
: *Ueber eine Methode, die Schwingungszeit eines Pendels
oder irgend eines schwingenden Stabes durch Coïncidenzen
mit einem Pendel oder Stabe von bekannter Schwingungs-
dauer zu ermitteln. Svo. [München, 1881]
: See also Bothkamp, Sternwarte.
**
Vogel (Hermann Carl) und Osw. Lohse:
*Untersuchungen über die Verwendbarkeit der Kollodion-
Photographie zur Beobachtung des bevorstehenden Venus-
Vorüberganges. 8vo. Leipzig, 1873

# Vogt (Carl):

Les prétendus organismes des météorites. 4to. Genève, 1882

# Voigt (Johann Heinrich):

Entwickelung der physischen Beschaffenheit der Kometen und ihres dadurch begründeten natürlichen Einflusses auf andere Weltkörper. Bey Gelegenheit des Kometen von 1807.

8vo. Rudolstadt, 1808

# Voiron ( — ):

Histoire de l'Astronomie, depuis 1781 jusqu'à 1811, pour servir de suite à l'Histoire de l'Astronomie de Bailly.

4to. Paris, 1810

Volpicelli (Paolo):

\*Descrizione della lampada elettro-dinamica del Sig. DuboscqSoleil.

4to. Roma, 1851

# Voltaire (François Marie Arouet de):

Élémens de la philosophie de Neuton mis à la portée de tout le monde.

8vo. Amsterdam, 1738

### Vorsselman de Heer (P. O. C.):

—: Specimen inaugurale de fractionibus continuis.

4to. Trajecti ad Rhenum, 1833

---: \*Note sur le calcul de l'inclinaison magnétique.

Svo. Genève, 1835

### Vulliamy (Benjamin Lewis):

: Some considerations on the subject of public clocks, particularly church clocks, with hints for their improvement.

4to. London, 1828

- ---: A supplement to the paper entitled 'some considerations on public clocks' . . . . consisting of a correspondence with the committee for building the new church at Bermondsey.

  4to. London, 1830
- ---: \*On the construction and regulation of clocks for railway stations. Svo. London, 1845
- : On the construction and theory of the dead escapement for clocks.

  8vo. London, 1846
- : A portion of the papers relating to the great clock for the new Palace at Westminster, with remarks. fol. London, 1848

# Wace (Henry):

A simple method of calculating logarithms to any number of figures.

8vo. London, 1873

# Wackerbarth (Francis Diedrich):

- —: \*Om planeten Neptunus. 8vo. Uppsala, 1865
- : \*A provisional theory of Leda. 4to. Upsala, 1866 : Fem-ställiga logarithm-tabeller, innehållande de vanliga
- logarithmerna från o till 11000, de naturliga logarithmerna från o till 10000, logarithmerna för die trigonometriska funktionerna, jemte en samling tabeller. Svo. Upsala, 1867

Wagner (A.):

[Notices of Astronomical books, from Astron. Gesellsch. Vierteljahrsschrift.] Svo. Leipzig, v.d.

### Waldo (Leonard):

Report of the Observations of the total Solar Eclipse, July 29, 1878, made at Fort Worth, Texas.

4to. Cambridge [U.S.], 1879

# Waldschmiedt (Johann Jacob):

Diatriba de atomis, finibus mundi et loco. [Inaugural Disscrtation.] 4to. Marburgi, 1687

## Walenn (W. H.):

\*On Unitation; a novel arithmetical operation.

Svo. London, 1868

### Wales (William):

Astronomical observations made in the voyages which were undertaken by order of His present Majesty for making discoveries in the southern hemisphere . . . . by Commodore Byron, Captain Wallis, Captain Carteret, and Captain Cook . . . . fol. London, 1788

### Walker (Charles V.):

\*Galvanic time-signals.

8vo. London, 1876

### Walker (D. F.):

An epitome of astronomy, with the new-discovered planets, and the late comet, as illustrated by the Eidouranion; or transparent Orrery. Svo. Edinburgh, 1824

### Walker (George):

On the doctrine of the sphere, in six books: to which is added an appendix, containing the solution of a problem for ascertaining the latitude and longitude of a place, together with the apparent time. 4to. London, 1777

### Walker (Robert):

Analysis of researches into the origin and progress of historical time. Svo. London, 1796

### Walker (Sears C.):

---: \*Researches relative to the planet Neptune. (Ephemeris

for the opposition of 1848.) 4to. Washington [1848] ---: \*Ephemeris of the planet Neptune for the years 1851 and 1852. 4to. Washington, 1851

### Walkingame (Francis):

The tutor's assistant, being a compendium of arithmetic and complete question-book. 9th edition. 12mo. London, 1771

#### Wallace (John):

--: A new treatise on the use of the globes, and practical astronomy; or a comprehensive view of the system of the 8vo. New York, 1812

---: Logarithmic tables: containing the logarithms of numbers, log. sines, tangents and secants, and natural sines.

8vo. [title wanting]

### Wallis (John):

---: A treatise of algebra, both historical and practical, shewing the original, progress, and advancement thereof . . . . With some additional treatises: I. Of the cono-cuneus . . . . II. Of angular sections . . . . III. Of the angle of contact . . . IV. Of combinations, alterations, and aliquot parts.

3 parts in 1 vol. fol. London, 1685-84

---: Opera mathematica. 3 vols. fol. Oxoniæ, 1699-93

#### Wallis (John):

A brief examination of the nebulous hypothesis, with strictures on a work entitled 'Vestiges of the natural history of creation.' Svo. London, 1845

3/9
Walmesley (D. C.):
The theory of the motion of the apsides in general, and of the apsides of the Moon's orbit in particular. [Translated from the French.]  4to. London, 1754
Warburton (Henry):
: *On the partition of numbers, and on combinations and permutations. 4to. Cambridge, 1849: *On self-repeating series. 4to. Cambridge, 1856
Ward (Hon. Mrs.):
Telescope teachings. Svo. London, 1859
Ward (John):
: The young Mathematician's guide; being a plain and easy introduction to the mathematicks The seventh edition, to which is added a supplement, containing the history of logarithms.  Svo. London, 1740  The Lives of the Professors of Gresham College: to which is prefixed the Life of the Founder, Sir Thomas Gresham.  fol. London, 1740
: Posthumous works Part 1, containing his new method of navigation Part 2, containing the doctrine of the sphere Revised by George Gordon.  8vo. London, 1765
: Life, see Birch (T.).
Ward (Seth), Bishop of Salisbury: Astronomia geometrica; ubi methodus proponitur qua pri-
mariorum planetarum astronomia, sive { elliptica circularis } pos-
sit geometricè absolvi. 3 parts in 1 vol. 8vo. Londini, 1656
Warner (Thomas):
: How to keep the clock right by observations of the fixed stars with a small fixed telescope. Svo. London, 1869: Ditto. Improved edition. Svo. London, 1876
Warren (Henry White):
Recreations in astronomy, with directions for practical experiments and telescope work. 12mo. New York, 1880
Wartmann (Louis Frédéric):  ——: Cartes Célestes [six maps, showing the apparent paths of the Comets of Halley, Biela, Encke, &c.]  6 sheets [with text 8vo.], Genève, 1828–35
- : Cartes célestes sur un plan nouveau, contenant toutes les étoiles de 1 <sup>re</sup> à 6 <sup>me</sup> grandeur visibles en Europe.  2 sheets [with text 8vo.], Genève, 1835  : *Notice sur la réapparition de la comète à courte période
d'Encke, 8vo. Genève, 1838
Washburn Observatory of the University of Wisconsin:  — : Contributions Number 1. 4to. Madison, 1881  — : Publications Vol. 1. (E. S. Holden, Director.)  8vo. Madison, 1882

Washington, Bureau of Navigation:
——: The American Ephemeris and Nautical Almanae, 1855–83.  8vo. Washington, 1852–80
——: Supplement (Asteroids for the year 1865).  8vo. Washington
: Almanac Catalogue of Zodiacal Stars.
8vo. Washington, 1864  ——: Tables of Mercury, by J. Winlock. 4to. Washington, 1864  ——: Tables of Harmonia, by E. Schubert. 4to. Washington, 1869
: Tables to facilitate the reduction of places of the fixed stars.  4to. Washington, 1869
——: Tables of Parthenope, by E. Schubert.  4to. Washington, 1871
——: Tables of Venus, by G. W. Hill. 4to. Washington, 1873 ——: Logarithms of sines and cosines, with the argument in time.  Svo. Washington, 1874
——: Continuation of Damoiscau's Tables of the satellites of Jupiter to 1900, by D. P. Todd. 4to. Washington, 1876
— : Astronomical papers prepared for the use of the American Ephemeris and Nautical Almanac. Vol. 1–3, No. 1. 4to. Washington, 1882 [1879]–84
Vol. 1, No. 1. On the recurrence of solar eclipses from B.C. 700 to A.D. 2300. Newcomb.
<ol> <li>A transformation of Hausen's Lunar Theory, compared with the theory of Delaunay. Newcomb &amp; Meier.</li> <li>Experimental determination of the velocity of light made at the U.S. Naval Academy. Michelson.</li> <li>Catalogue of 1098 standard clocks &amp; zodiacal stars. New-</li> </ol>
comb. 5. On Gauss's method of computing secular perturbations,
with an application to the action of Venus on Mercury. Hill.
6. Discussion of observed Transits of Merenry, 1677–1881.  Newcomb.
2, No. 1. Coefficients for correcting planetary elements. Newcomb & Meier.
2. Investigations of corrections to Greenwich planetary observations, 1762–1830. Safford.
3, No. 1. Development of the perturbative function and its derivatives.  Newcomb.
Washington, National Institution for the Promotion of Science:
: Bulletin of the Proceedings. No. 1-3. 8vo. Washington, 1841-45
: Constitution and By-Laws. 8vo. Washington, 1840 : Discourse delivered at the first anniversary, by J. R. Poinsett. 8vo. Washington, 1841
Washington, Philosophical Society: Bulletin. Vol. 1-6. 8vo. Washington, 1874-84
Washington, Smithsonian Institution:  —: Smithsonian Contributions to knowledge. Vol. 1-23.
4to. Washington, 1848-81 ——: Annual Report of the Board of Regents, 1849-52,1854-82. 8vo. Washington, 1850-84

#### Washington, Smithsonian Institution - continued. - : Smithsonian Miscellaneous Collections. Vol. 1 27. 8vo. Washington, 1862-83 Washington, United States Hydrographic Office: —: Practical Papers. No. 5, The determination of secondary meridians by electric telegraph, and the personal equation, by F. M. Green and E. S. Holden. 8vo. Washington, 1876 -: An observing list of stars selected for the determination of time with the portable meridian transit in the Southern hemisphere. Svo. Washington, 1877 —: Report on the telegraphic determination of differences of longitudes in the West Indies and Central America, by F. M. Green. 4to. Washington, 1877 —: Telegraphic determination of longitudes on the East Coast of South America, embracing the meridians of Lisbon, Madeira [&c.], by F. M. Green, C. H. Davis, and J. A. Norris, in 1878 and 1879. 4to. Washington, 1880 -: Telegraphic determination of longitudes in Japan, China. and the East Indies. By F. M. Green, C. H. Davis, and 4to. Washington, 1883 J. A. Norris, 1881-82. Washington, United States Naval Observatory: — : Magnetical and Meteorological Observations made at Washington . . . . by Lieut. J. M. Gilliss (1838-42). Svo. Washington, 1845 —: Astronomical Observations made . . . . by Lientenant J. M. Gilliss (1838-1842). 8vo. Washington, 1846 -: Astronomical Observations made during the years 1845, 4to. Washington, 1846-67 1847, 1851 & 1852. Appendix, 1847. A. Observations on solar spots. Sestini. on the Mississippi river. R. A. Marr. C. Tables for reduction of the places of the fixed stars. — : Astronomical and Meteorological Observations made during the years 1861-79. 4to. Washington, 1862-83 Appendices, 1862. Longitude of Washington. Solar parallax from Observations of Mars, 1862. 1863. A. New elements of Nemausa. Latitude and Longitude of U.S. Naval Observatory. Newcomb. I. Description of the Transit Circle. II. Investigation of the Distance of the Sun. Newcomb. Discussion of Meteorological Observations, 1842-67. 1866. I. Difference of Longitude between Washington and 1867 Havana. Harkness. II. Observations of the Total Eclipse of the Sun, August 7, 1869 III. Positions of Fundamental Stars from Washington Observations, 1862-67. Newcomb. IV. Catalogue of 151 Stars in Presepe. Hall. Catalogue of Stars observed by the U.S. Astrono-1868. mical Expedition to the Southern Hemisphere, 1850-52. Gilliss. I. Reports on Total Solar Eclipse of Dec. 22, 1870. 1869.

H. Zones of Stars observed with the Mural Circle,

1846 49.

### Washington, United States Naval Observatory (Appendices)-continued.

I. Difference of Longitude between Washington and 1870. St. Louis. Harkness.

> II. Reports on Observations of Encke's Comet. Hall and Harkness.

III. Right Ascensions of Equatorial Fundamental Stars. Newcomb.

IV. Zones of Stars observed with the Meridian Transit Instrument, 1846-49.

I. Zones of Stars observed with the Meridian Circle, 1847-49.

II. Results of Observations made with the Transit Instrument and Mural Circle, 1853-60.

III. Catalogue of Stars observed during the years 1845-71. Yarnall.

Ditto, second edition, 1878.

IV. Memoir of the Founding and Progress of the U.S. Naval Observatory.

I. Tables for the Reduction of Transit Observations. Eastman.

II. Difference of Longitude between Washington and Detroit, Mich.; Carlin, Nevada; and Austin, Nevada. Eastman.

The Uranian and Neptunian Systems investigated 1873. with the 26-inch Equatorial. Newcomb.

I. Instruments and Publications of the U.S. Naval 1874. Observatory, 1845-76.

II. Difference of Longi ude between Washington and

Ogden, Utah. Eastman.

I. Difference of Longitude between the U.S. Naval Observatory and the Sayre Observatory of 1875 Lebigh University. Eastman.

II. Researches on the Motion of the Moon. Part I, Reduction of Observations made before 1750. Newcomb.

III. Chronometer Rates as affected by Change of Temperature and other Causes. Davis.

I. A Subject-Index to the Publications of the U.S. 1876. Naval Observatory, 1845-75. Holden.

II. Reports on Observations of the Transit of Mercury, May 1878.

III. Reports on the total solar eclipses of July 1878 and Jan. 1880.

I. Investigation of the Objective and Micrometer of the 26-inch Equatorial. Holden.
II. The multiple star ≥ 748. Holden.

III. Solar parallax from Meridian Observations of Mars, 1877. Eastman.

IV. Longitude of Cincinnati Observatory. Eastman.

V. Longitude of the Morrison Observatory, Glasgow,

Mo. Eastman and Pritchett.

VI. Observations of Double Stars.

I. Monograph of the Nebula of Orion. Holden. 187S. II. Longitude of the J. C. Green School of Science, Princeton, N.J. Paul and Young.

I. Parallax of a Lyræ and 61 Cygni. Hall. 1879. II. Determination of the Semidiameter of the Moon.

Paul. I. Observations of the Great Comet of ISS2. Win-188o.

- : Nautical Monographs. No. 1, The winds at sea.

4to. Washington, 1859

Washington, United States Naval Observatory—continued.
—: Ephemeris of Stars proper for observation with the planet
Mars, near the opposition, 1862. Svo. Washington, 1862
-: Observations and discussions of the November Meteors of
1867. Svo. Washington, 1867
: November Meteors of 1868. [Report by J. R. Eastman.]  8vo. Washington
—: Instructions for observing the Transit of Mercury, 1878,
May 5-6. 4to, Washington, 1878
: Instructions for observing the total Solar Eclipse of July 29, 1878.  4to. Washington, 1878
—: Instructions for observing the transit of Venus, December 6, 1882. 4to. Washington, 1882
: Report for the year 1877-78. By Admiral Rodgers.
8vo. Washington, 1878 —: Catalogue of the Library. Part 1, Astronomical Biblio-
graphy, by Edward S. Holden. 4to. Washington, 1879
Washington, United States Patent Office:
Results of Meteorological observations made under the direc-
tion of the United States Patent Office and the Smithsonian
Institution, from the year 1854 to 1859 inclusive. Vol. 1,
2, Part 1. 4to. Washington, 1861-64
Washington, War Department:
-: Second, third (and fourth) Reports on Meteorology, by J.
P. Espy. fol. and 4to. Washington, 1850–57
: Meteorological register for the years 1826-30, from obser-
vations made by the surgeons of the army, and others
to which is appended the meteorological register for the
years 1822–25. Svo. Philadelphia, 1840
- : Meteorological Register for twelve years, from 1831 to 1842
inclusive; compiled from observations made by the officers
of the medical department of the army.  8vo. Washington, 1851
-: Army Meteorological Register, for twelve years, from 1843
to 1854 inclusive. 4to. Washington, 1855
400 1054 morasi o 400 11 mington, 1055
Washington, War Department: Signal Office:
—: Daily Bulletin of Weather reports Oct. and Nov.
1872. 4to. Washington, 1873
- : Annual Report of the Chief Signal Officer to the Secretary
of War for the year 1880. 8vo. Washington, 1881
: Professional papers of the Signal Service, No. 2-12. 4to. Washington, 1881-82
Waterhouse (James):
-: *Photography in connection with the observation of the
transit of Venus at Roorkee, December 9th, 1874.
8vo. Calcutta, 1875
- : Report on the operations connected with the observation of
the total solar eclipse of April 6, 1875, at Camorta, in the
Nicobar Islands. fol. Calcutta, 1875

[Waterhouse (J.)]:

Diagrams of a few double, triple, and multiple stars, as seen upon the meridian with an inverting telescope. 4to. [1844]

Waterhouse (John):

Eight years' meteorology of Halifax, being a record of observations taken at Well Head during the years 1866 to 1873 inclusive.

4to. Halifax, 1874

Waterston (John James):

---: An account of a mathematical theory of Gases.

8vo. [London, 1845]

---: \*An account of Observations on Solar radiation.

8vo. London, 1862

Watson (James C.):

Theoretical astronomy relating to the motions of the heavenly bodies revolving around the sun in accordance with the law of universal gravitation. 8vo. Philadelphia, 1868

Watts (Isaae):

The knowledge of the heavens and the earth made easy; or the first principles of astronomy and geography explained by the use of globes and maps. Sth edition.

Svo. London, 1772

Watts (W. Marshall):

Index of Spectra. 8vo. London, 1872

Waud (S. W.):

A Treatise on algebraical geometry. (Library of Useful Knowledge.) 8vo. London, 1835

Webb (Thomas William):

- : Celestial Objects for common telescopes. 8vo. London, 1859

—: Ditto. Second edition. 8vo. London, 1868

—: Ditto. Fourth edition. Svo. London, 1881

Webster (John):

Elements of natural philosophy . . . . with a general view of the solar system. 8vo. London, 1804

Webster (William):

Arithmetick in epitome; or a compendium of all its rules, both vulgar and decimal. 5th edition. 12mo. London, 1735

Webster (William Henry Bayley):

The recurring monthly periods and periodic system of the atmospheric actions, with evidences of the transfer of heat and electricity, and general observations on meteorology.

Svo. London, 185

Weddle (Thomas):

A new, simple, and general method of solving numerica, equations of all orders.

4to. Tynemouth, 1842

Weidenbach (- von):

Tafel um den Logarithmen von  $\frac{x+x}{x-1}$  zu finden, wenn der Logarithme von x gegeben ist; mit einem Vorworte von Herrn Gauss.

Weidler Johann Friedrich):
-: Historia Astronomiae; sive de ortu et progressu astronomiae
liber singularis. 4to. Vitembergae, 1741 ——: De via curva Mercurii sub Sole in rectam convertenda
exemplo transitus Mercurii per Solem d. v Novembris a.
MDCCXLIII. illustrata, commentatio. 4to. Vitembergae, 1748 ——: Institutiones astronomiae, selectis observationum et calcu-
lorum exemplis illustratae. 4to. Wittenbergae, 1754
: Bibliographia Astronomica, temporis quo libri vel compositi
vel editi sunt ordine servato, ad supplendam et illustran- dam astronomiae historiam digesta. Accedunt historiae
astronomiae supplementa. 8vo. Wittenbergae, 1755
Weigel (Erhard):
Speculum Uranicum Aquilæ Romanæ Sacrum. Das ist Himels Spiegel, darinnen ausser denen ordentlichen, auch die unge-
wöhnlichen Erscheinungen des Himmels mit gebührenden
Anführungen abgebildet, vornehmlich aber der im Gestirne des Adlers jüngsthin entstandene Comet: nebeust einer
neuen Himmels-Charte. 4to. Jehua, 1661
Weights and Measures (Acts for regulating):
Acts of 5 George IV. (Cap. 74); 4 & 5 William IV. (Cap. 49);
and 5 & 6 William IV. (Cap. 63). fol. London Weigl (J. B.):
Lehrbuch der Arithmetik und Algebra zum öffentlichen
Gebrauche und Selbstunterrichte; mit metrologischen Tafeln. Zweyte Ausgabe. 8vo. Sulzbach, 1823
Tafeln. Zweyte Ausgabe. 8vo. Sulzbach, 1823 Weiler (August):
: *Über das Problem der drei Körper im Allgemeinen und
insbesondere in seiner Anwendung auf die Theorie des
Mondes. 4to. Leipzig, 1866 —: *Grundzüge einer neuen Störungstheorie und deren An-
wendung auf die Theorie des Mondes. 4to. Leipzig, 1872
Weinbach (And.):
Neues Welt-System, dargestellt wie es ist. 8vo. Mainz, 1850 Weinek (L.):
*Die Photographie in der messenden Astronomie, insbeson-
dere bei Venusvorübergängen. 4to. Halle und Dresden, 1879
Weiss (Edmund):
—: *Über die Bahn des Kometen VIII des Jahres 1858. 8vo. Wien, 1858
-: *Die totale Sonnenfinsterniss vom 31. December 1861 in
Griechenland. 8vo. Wien, 1862 : *Über die Bahn von (59) Elpis. 8vo. Wieu, 1862
— : Ueber Sternschnuppen. Ein Vortrag. 8vo. Wien, 1863
: Planeten- und Cometen-Beobachtungen am Refractor von sechs Zoll Öffnung, von September 1862 bis December
1864. Svo. Wien
—: Ueber Fixsternsysteme. Ein Vortrag. 8vo. Wien, 1865
: *Bahnbestimmung von Maja (66). 8vo. Wien, 1865 : Ueber die Mondoberfläche. Ein Vortrag. 8vo. Wien, 1860

Weiss (Edmund)—continued
: *Berechnung der Sonnenfinsternisse des Jahres 1867.
8vo. Wien, 1860
-: *Bericht über die Beobachtungen während der ringför
migen Sonnenfinsterniss am 6. März 1877 in Dalmatien.
8vo. Wien, 1867 —: *Berechnung der Sonnenfinsternisse in den Jahren 1868
bis 1870. 8vo. Wien, 1867
: *Beiträge zur Kenntniss der Sternschnuppen. [2 papers.
8vo. Wien, 1868–70
: *Bestimmung der Längendifferenz Wien-Wiener Neustadt
durch Chronometer-Übertragungen. 8vo. Wien, 1872
—: *Sternschnuppen-Beobachtungen ausgeführt in den Jahren
1867–1874 [2 papers]. 8vo. Wien, 1873–74
: *Sternschnuppen-Beobachtungen, ausgeführt von August
1874 bis Ende 1877 (und in den Jahren 1840 bis 1845).
8vo. Wien
: *Beobachtung des Venusdurchganges vom 8. December 1874
in Jassy, und Bestimmung der geographischen Länge des Beobachtungsortes. 8vo. Wien, 1875
- : See also Vienna, K.K. Sternwarte.
· · · · · · · · · · · · · · · · · · ·
Weiss (Edmund), Th. Oppolzer, und J. Riha:
Berichte (1-7) der zur Beobachtung der totalen Sonnen- finsterniss des Jahres 1868 nach Aden unternommenen
oesterreichischen Expedition. [Mit] Discussion der
Beobachtungen von Edmund Weiss.
8vo. Wien, 1868–70
Weiss (Friedrich):
Die Gesetze der Satellitenbildung. Einleitung zur Geschichte
der Erde. Svo. Gotha, 1860
Weisse (Christoph);
Terræ motum tempore passionis Christi observatum. [Inau-
gural Dissertation.] 4to. Jenæ, 1683
Weisse (Maximilian):
: Coordinatae Mercurii, Veneris, Martis, Jovis, Saturni et
Urani. 4to. Cracoviae, 1829
: Correctiones temporis ex altitudinibus correspondentibus.
4to. Cracoviae, 1829
: Positiones mediae stellarum fixarum in zonis Regiomon-
tanis a Besselio inter - 15° et + 15° declinationis obser-
tanis a Besselio inter - 15° et + 15° declinationis obser- vatarum, ad annum 1825 reductae et in catalogum
ordinatae. Edit, curavit et praefatus est F. G. W. Struve.
4to. Petropoli, 1846
: Positiones mediae stellarum fixarum in zonis Regiomontanis
a Besselio inter + 15° et +45° declinationis observatarum,
ad annum 1825 reductae et in catalogum ordinate. Edit,
curavit et pracfatus est Otto Struve. 4to. Petropoli, 1863
: *Vergleichung des catalogus generalis pro 1830 in Struve's
Stellarum fixarum positiones mediae mit den beiden Katalogen aus Bessel's Zonen-Beobachtungen.
Deiden Katalogen aus bessels Zonen-beobachtungen.

Weisse (Maximilian) -continued.

: \*Variationen der Declination der Magnetnadel beobachtet in Krakau. 4to. Wien, 1859

---: See also Cracow, Sternwarte.

Weisse (Maximilian) und Adalbert Kunes:

\*Stündliche Burometer-Beobachtungen zu Krakau in den Jahren 1848-56. 4to. Wien, 1858

### Weld (Charles Richard):

A history of the Royal Society, with memoirs of the Presidents, compiled from authentic documents.

2 vols. Svo. London, 1848

Weller (Adolph P.), see Schilling und Weller.

### Wells (Edward):

——: The Young Gentleman's course of mathematicks, containing the more useful and easy elements of arithmetick, geometry, trigonometry, mechanicks, opticks, astronomy, chronology, dialling. Vol. 1 & 2.

Svo. London, 1714

----: The Young Gentleman's astronomy, chronology, and dialling, containing such elements of the said arts or sciences, as are most useful and easy to be known.

Svo. London, 1725

### W[ells] (J[ohn]):

Sciographia, or the art of shadowes, Plainly demonstrating, out of the Sphere, how to project great and small circles, upon any Plane whatsoever, with a new Conceit of reflecting the Sunne beames upon a Diall, contrived on a Plane, which the direct beames can never shine upon. Together with the manner of cutting the five Regular Platonicall bodies . . . All performed by the Doctrine of Triangles; and for ease and delight sake by helpe of the late invented and worthily admired Numbers, called by the first Inventor Logarithmes. By I. W. Esquire.

8vo. London, 1635

Followed by the table of Briggs's Logarithms (Goude, 1826).

### Wells (William Charles):

Two essays: one upon single vision with two eyes; the other on dew [&c.] Svo. London, 1818

#### Wendelinus (Gottfried):

Eclipses lunares ab anno MDLXXIII ad MDCXLIII observatæ; quibus tabulæ atlanticæ superstruuntur carumque idea proponitur.

4to. Antverpiæ, 1644

#### West (John):

Elements of mathematics, comprehending geometry, conic sections, mensuration, spherics.

8vo. Edinburgh, 1784

#### Wetherald (R.):

Perpetual calculator (the), or time's universal standard. (Chronology, solar system, pneumatics and hydrostatics.)

8vo. Newcastle upon Tyne, 1760

Wetzel (Eduard);
Allgemeine Himmelskunde: eine populäre Darstellung diese
Wissenschaft nach den neuesten Forschungen
Zweite Auflage. 8vo. Berlin, 1870
Weyer (G. D. E.):
: Über die Differentialformeln für Cometenbahnen von grosse:
Excentricität mit Berücksichtigung der planetarischer
Störungen. 8vo. Berlin, 1852
: *Ueber die kürzeste Berechnungsart der Monddistanzen in
nautischen Gebrauch. 4to. Berlin, 1881: *Ueber die Berechnung des wahrscheinlichsten Chronome.
terganges aus einer Reihe von Standbeobachtungen und
über Gewichtsbestimmungen aus Standunterschieden der
Chronometer. 4to. Berlin, 1881
- : *Die Wiedererscheinung der Methode und Tafel von Elfore
als sogenannte 'Neger-Tafel.' 4to. Berlin, 1882
: *Konstruktion zu einer Küstenaufnahme imVorbeifahren
nebst Beiträgen zur Geschichte der geometrischer
Auflösungen der sogenannten Pothenot'schen Aufgabe.
4to. Berlin, 1882
: *Bericht über eine neue Schrift von Sir G. B. Airy, die Be
rechnung der Monddistanzen betreffend. 4to. Berlin, 1882
: *Die direkten oder strengen Auflösungen für die Bestim
mung des Beobachtungsortes aus zwei Höhen der Sonne
oder anderer bekannten Gestirne, nebst dem Zeitunterschiede
der Beobachtungen. 4to. Berlin, 1883
Weyprecht (Karl):
An address delivered at Graz, 1875. Fundamenta
principles of scientific Arctic investigation. 4to
Weyprecht (Karl) et le Comte Wilczek:
Programme des travaux d'une expédition polaire interna-
tionale. 4to
Wharton (George):
An astrologicall jydgement upon his Majesties present
march 1645. 4to. Oxford, 1645
Whatton (Arundell Blount):
Memoir of the life and labors of the Rev. Jeremiah Horrox
curate of Hoole, near Preston; to which is appended a
translation of his celebrated discourse upon the Transit of
Venus across the Sun. 8vo. London, 1859
Whewell (William):
: An elementary treatise on mechanics Vol. 1, con-
taining statics and part of dynamics. 8vo. Cambridge, 1819
: A treatise on dynamics: containing a considerable collection of mechanical problems.  8vo. Cambridge, 1823
: An introduction to dynamics, containing the laws of
motion and the first three sections of the Principia.
8vo. Cambridge, 1832
- : Analytical statics: a supplement to the fourth edition of an
clementary treatise on mechanics Svo Cambridge 1822

Whowell (William) - on tinued.
: Astronomy and general physics considered with reference to natural theology. [Bridgewater treatises, 111.] Second edition. Svo. London, 1853  : Ditto. 8th edition. Svo. London, 1871  : Die Sternewelt, als Zeugniss für die Herrlichkeit des Schöpfers. Aus dem Englischen von Gustav Plieninger. Svo. Stuttgart, 1837  : Newton and Flamsteed. Remarks on an article in number cix. of the 'Quarterly Review.' Svo. Cambridge, 1836  []: Of the plurality of worlds: an essay. Svo. London, 1853  : Of the plurality of worlds: an essay. Also a dialogue on the same subject The fifth edition.
<ul> <li>: History of the Inductive Sciences from the earliest to the present time The third edition, with additions.</li> <li>3 vols. 8vo. London, 1857</li> <li>: Ditto. Supplementary volume to the second edition</li> </ul>
containing the new matter of the third edition.  8vo. London, 1857
Whipple (George Mathews):
: *On the comparison of the standard Barometers of the Royal Observatory, Greenwich, and the Kew Observatory.  8vo. London, 1878
: *On the relative duration of sunshine at the Royal Observatory, Greenwich, and at the Kew Observatory, during the year 1877.  8vo. London, 1878
: *On the relation between the height of the barometer, the duration of sunshine, and the amount of cloud, as observed at the Kew Observatory.  Svo. London, 1879  : *On the relation existing between the duration of sunshine,
the amount of solar radiation, and the temperature indicated by the black-bulb thermometer in vacuo.  Svo. London, 1879
: *On the rate at which barometric changes traverse the British Isles.  8vo. London, 1880
Whiston (William):
: Prælectiones astronomicæ Cantabrigiæ in scholis publicis habitæ quibus accedunt tabulæ plurimæ astronomicæ Flamsteedianæ correctæ, Halleianæ, Cassinianæ, et Stree- tianæ. 8vo. Cantabrigiæ, 1707
- : Astronomical lectures read in the publick schools at Cambridge; whereunto is added a collection of astronomical tables; being those of Mr. Flamsteed, corrected; Dr. Halley; Monsieur Cassini; and Mr. Street.  8vo. London, 1715
<ul> <li>: Ditto. Second edition.</li> <li>: An account of a Surprising Meteor, seen in the Air, March the 6th, 17<sup>1.5</sup>/<sub>1.6</sub> at night The second edition.</li> </ul>

Whiston (William)-continued. -: The longitude and latitude found by the inclinatory or Dipping Needle, wherein the laws of magnetism are also dis-To which is prefix'd an historical preface, and to which is subjoin'd Mr. Robert Norman's New Attractive, or account of the first invention of the Dipping Needle. 2 parts, 8vo. London, 1721 (1720) -: A new theory of the earth, from its original to the consummation of all things; wherein the creation of the world in six days, the universal deluge, and the general conflagration as laid down in the Holy Scriptures are shown to be perfectly agreeable to reason and philosophy . . . . third 8vo. London, 1722 edition. —: The calculation of Solar Eclipses without Parallaxes. With a specimen of the same in the total eclipse of the Sun, Svo. London, 1724 May 11, 1724. -: Astronomical principles of religion, natural and reveal'd . . . . Second edition. Svo. London, 1725 —: The longitude discovered by the eclipses, occultations, and conjunctions of Jupiter's planets; with descriptions of the instruments necessary for this discovery; to which is added an ephemeris for the latter half of the year 1738. Svo. London, 1738 Whiston (William) and Humphry Ditton: A new method for discovering the longitude both at sea and land, humbly proposed to the consideration of the publick. 8vo. London, 1714 White (Daniel Appleton): An Eulogy on the life and character of Nathaniel Bowditch. 8vo. Salem, 1838 White (Martin): Remarks on the winds, tides, and currents of the ocean, with 8vo. London, 1846 other phenomena. Whitehurst (John): An attempt towards obtaining invariable measures of length, capacity, and weight, from the mensuration of time, independent of the mechanical operations requisite to ascertain the centre of oscillation or the true length of pendulums. 4to. London, 1787 (Whitford, J.): The pendulum: an epitome of the principles of its calculations 8vo. Stockport, 1872 for any latitude. Whiting (Thomas): -: Mathematical, geometrical, and philosophical delights, containing essays, problems, solutions, theorems, &c., selected from an extensive correspondence by T.. W. No. 1-10. 4to, London, 1792-97 ---: Scientific Receptacle (the), containing problems, solutions [&c.] . . . . selected from an extensive correspondence by T. . W. . 12mo. London, 1795 Vol. 1. -: A comprehensive system of astronomy, both theoretic and

practical, with extensive tables of the Sun, Moon, and

planets

4to. London, 1828

391 Whitney William D.): \*On the lunar zodiac of India, Arabia and China. 8vo. Cambridge (Mass.), 1874 Wichmann (Moritz): ----: De parallaxi stellae Argelandriae (1830 Groombridge). [Inaugural Dissertation.] 4to. Regiomonti Prussorum, 1847 ---: \*Erster Versuch zur Bestimmung der physischen Libration des Mondes aus Beobachtungen mit dem Heliometer. 4 to. Altona, 1847-48 Wiedeburg (Johann Bernhard): Astronomische Beschreibung und Nachricht von dem Cometen welcher im Monath Mertz dieses jetztlauffenden Jahres 1742 erschienen. 4to. Jena, 1742 Wijkander (August): Beräkning af planeten (117) Lomias Bana. [Inaugural Dissertation. 4to. Lund, 1872 Wilcocks (Alexander): \*Thoughts on the influence of ether in the solar system, its relations to the zodiacal light, comets, the seasons, and periodical shooting stars. 4to. Philadelphia, 1864 Wildig (G. B.): A geometrical system of conic sections, for the use of mathematical students at the Royal Liverpool Institution. Svo. Cambridge, 1822 Wildt (Joh. Christ. Dan.): Commentatio de rotatione annuli Saturni. [Inaugural Dissertation. 4to. Hannoverae, 1795 Wilkes (Charles): Theory of the zodiacal light. 4to. Philadelphia, 1857 Wilkins (John), Bishop of Chester: [——]: The discovery of a world in the Moone, or, a discovrse tending to prove, that 'tis probable there may be another habitable World in that Planet.

8vo. London, 1638 —— : A discovery of a New World, or a discourse tending to prove, that 'tis Probable there may be another Habitable World in the Moon. With the Discourse concerning the probability of a passage thither. Unto which is added a Discourse Concerning a New Planet, tending to prove that 'tis Probable our Earth is one of the Planets. The fourth edition cor-

rected and augmented.

Svo. London, 1684

----: Mathematical magick, or the wonders that may be performed by mechanichal geometry. In two books, concerning mechanical powers [and] motions.

Svo. London, 1680

——: Mathematical and philosophical works; . . . . to which is prefixed the author's life, and an account of his works.

2 vols. 8vo. London, 1802

#### Wilkins (N. G.):

Rules for effecting certain operations in division in a neat and expeditious manner.

8vo. Hanover, 1878

# Wilkinson (Thomas T.): ——: \*On bisectant axes, and their relation to the radical axes of two or more given circles. 12mo. London, 1852

---: \*Additions to the late Mr. T. S. Davies's notes on geometry and geometers. 8vo. London, 1852

----: \*An account of the early mathematical and philosophical writings of the late Dr. Dalton. Svo. Manchester, 1854
----: \*The Lancashire Geometers and their writings.

8vo. Manchester, 1854
—: \*De Tactionibus; or some problems on contact, as treated

: \*De Tactionibus; or some problems on contact, as treated geometrically by Apollonius, Vieta, and Swale.

Svo. Liverpool, 1872

#### Williams (John):

Observations of Comets, from B.C. 611 to A.D. 1640, extracted from the Chinese annals. Translated, with introductory remarks, and an appendix, comprising the tables necessary for reducing Chinese time to European reckoning, and a Chinese Celestial Atlas.

4to. London, 1871

#### Williams (W.):

The mathematical demonstrations of Euclid rendered clear
... with no other mathematical instruments than the
... Chinese Puzzle.

12mo. London, 1817

#### Williams (W. Mattieu):

The fuel of the Sun.

8vo. London, 1870

#### Williamson (Thomas):

Mathematics simplified and practically illustrated . . . . together with a complete essay on the art of surveying lands, &c. 8vo. London, 1808

#### Willich (Charles M.):

Popular tables, arranged in a new form, giving information at sight for ascertaining . . . . the value of lifehold, leasehold, and church property, renewal fines, &c. . . . Third edition.

8vo. London, 1853

# Wilna, Observatoire de l'Académie Impériale des Sciences:

----: Extrait des observations faites . . . . pendant les années 1834-35, 1837-38, 1839-40, par (P. de) Slavinsky et ---- Hlouschnevitch. 4to. Vilna, 1838-42

----: Remarques sur les observations faites à l'Observatoire de Vilna . . . . par P. de Slavinski. 4to. Vilna, 1835

#### Wils (Pieter):

Wis-konstige Wercken, bestaende in eenighe Meet-konstighe ende hemel-klootsche aenteyckeningen elck met hare verklaringhen ende bewijsen. [Edited by G. Kinckhuysen.] 4to. Amsterdam, 1653

#### Wilson (Henry):

Trigonometry improv'd, and projection of the Sphere made easy.

12mo. London, 1720

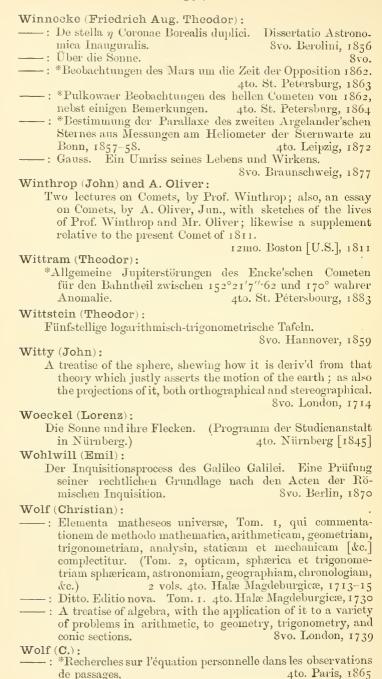
#### Wilson (H.C.):

Observations of Comets. See Cincinnati Observatory.

Wilson (James):
-: A complete dictionary of astrology. Svo. London, 1819
- : A new and complete set of astrological tables.
8vo. London, 1820
Wilson (J. Maurice):
-: Elementary geometry. Books 1, 2, 3, containing the sub-
jects of Euclid's first four books; following the syllabus of
geometry prepared by the Geometrical Association.
8vo. London, 1873
: See also Crossley and Gledhill.
Wilson (John):
The lost solar system of the ancients discovered.
2 vols. 8vo. London, 1856
Windsor, New South Wales:
Meteorological Observations made at the Private Observatory
of John Tebbutt 1863–81. fol. Sydney, 1868–82
Wing (John):
Ephemerides of the celestial motions for six years, beginning
anno 1702 and ending anno 1707. 4to. London, 1702
Wing (Vincent):
—: Harmonicon Cœleste: or the cœlestiall harmony of the
visible world, containing an absolute and entire piece of
Astronomie. Wherein is succinctly handled the trigono-
metricall part, generally propounded and particularly
applyed in all questions tending to the diurnall motion.
Especially respecting, and truly subservient to the main
doctrine of the second motions of the luminaries and other
planets, together with their affections, as eclipses, &c.
fol. London, 1651
-: An ephemerides of the celestiall motions for VII years, be-
ginning anno 1652, ending anno 1658. 4to. London, 1652
-: An ephemerides of the collectial motions for XIII years, be-
ginning anno 1659, ending anno 1671. 4to. London, 1656-57
: Astronomia Britannica, in qua per novam concinnioremque methodum, hi quinque tractatus traduntur: I. Logistica
astronomica II. Trigonometria III. Doctrina
sphærica IV. Theoria planetarum V. Tabulæ
novæ astronomicæ Cui accessit observationum
astronomicarum Synopsis Compendiaria.
2 parts in 1 vol. fol. Londini, 1669-68
Wingate (Edmund):
. Λογαριθμοτεχνία, or the construction and use of the logarith-
meticall tables. Second edition. 12mo. London, 1635
-: Mr. Wingate's Arithmetick; containing a plain and
familiar method for attaining the knowledge and practice
of common arithmetick. Revised by J. Kersey. 15th
edition, with a new supplement, by G. Shelley.
8vo. London, 1726

Winlock (Joseph):

---: Tables of Mercury, for the use of the American Ephemeris and Nautical Almanac. 4to. Washington, 1864 and Nautical Almanac. 4to. Washi
---: See also Washington, U.S. Naval Observatory.



Wolf (C.)—continued.
-: *Description du groupe des Pléiades et mesures micromé-
triques des positions relatives des principales étoiles qui
le composent. 4to. Paris, 1877
: *Recherches historiques sur les étalons de poids et mesures et les appareils qui ont servi à les construire. 4to. Paris, 1882
Wolf (Rudolf):
: *Neue Untersuchungen über die Periode der Sonnenflecken und ihre Bedeutung. 8vo. Bern, 1852
und ihre Bedeutung. Svo. Bern, 1852 : *Johann Baptist Cysat von Luzern. Ein Beitrag zur
Geschichte der Mathematik und Physik in der Schweiz.
8vo. Bern, 1853
: *Mittheilungen über Sternschnuppen und Feuerkugeln.
8vo. Zürich, 1856
— : Ueber Cometen und Cometen-Aberglauben. Ein populärer Vortrag. Svo. Zürich, 1857
: Biographien zur Kulturgeschichte der Schweiz.
4 vols, 8vo, Zürich, 1858-62
— : Taschenbuch für Mathematik, Physik, Geodäsie und
Astronomie. Dritte Auflage. 8vo. Bern, 1860
-: Ditto. Vierte Auflage. 8vo. Zürich, 1869 :: Ditto. Fünfte Auflage. 8vo. Zürich, 1877
- Die Sonne und ihre Flecken. Ein Vortrag.
Svo. Zürich, 1861
: *Mittheilungen über die Sonnenflecken. 1–18.
8vo. Zürich, 1856-65
: *Astronomische Mittheilungen. 21-59. Band 1-4. 8vo. Zürich, 1866-83
: Wilhelm Herschel. Ein Vortrag. 8vo. Zürich, 1867
: *Matériaux divers pour l'histoire des mathématiques.
4to. Rome, 1869
-: Handbuch der Mathematik, Geodäsie, und Astronomie.
2 vols. 8vo. Zürich, 1869–72  ——: Johannes Keppler und Jost Bürgi: Vortrag.
8vo. Zürich, 1872
: Geschichte der Astronomie. Svo. München, 1877
: Geschichte der Vermessungen in der Schweiz, als historische
Einleitung zu den Arbeiten der schweiz-geodätischen Commission.
mission. 4to. Zürich, 1879 : *Quelques résultats déduits de la statistique solaire.
4to. Roma, 1881
— : Déterminations de longitude, see Plantamour et Wolf.
Wolfers (Jacob Philipp):
: Tabulae reductionum observationum astronomicarum annis
1860 usque ad 1880 respondentes: Additae sunt
tabulae Regiomontanae annis 1850 usque ad 1860 re-
spondentes ab Ill. Zech continuatae. 8vo. Berolini, 1858
: *Die totale Sonnen Finsterniss am 18. Juli 1860. 4to. Altona, 1858
-: *Neue Berichtigung der Elemente der Metis.
4to. Altona, 1859

Wolff (Julius Theodor):
Photometrische Beobachtungen an Fixsternen.
4to. Leipzig, 1877
Wollaston (Francis):
<ul> <li>: A specimen of a general Astronomical Catalogue, arranged in zones of north polar distance, and adapted to Jan. 1, 1790: containing a comparative view of the mean positions of stars, nebulæ, and clusters of stars together with</li> </ul>
a proposal for setting on foot some regular method of ob-
serving the heavens. fol. London, 1789 ——: Directions for making an universal meridian dial, capable
of being set to any latitude, which shall give the mean
solar time of noon, by inspection, without any calculation
whatsoever. 4to. London, 1793 ——: Fasciculus Astronomicus, containing observations of the
Northern circumpolar region; together with some account of the instrument with which they were made, and a new set of Tables by which they were reduced to the mean
position for the beginning of January 1800.
4to. London, 1800
- : A portraiture of the Heavens, as they appear to the naked
eye: constructed for the use of students in Astronomy.
Wolynski (Arturo):
: Fac-simile della prefazione di Niccolo Copernico [with fac- similes of letters, MSS., &c., of or relating to Copernicus].
: Nuovi documenti inediti del processo di Galileo Galilei.
8vo. Firenze, 1878 Wonders (the) of the Heavens displayed, in twenty lectures;
by the author of the Hundred Wonders of the World.  8vo. London, 1821
Wood (James):
——: The principles of mathematics and natural philosophy. Vol. 1, The elements of algebra. Svo. Cambridge, 1795
——: The elements of optics, designed for the use of students in
the University. , 8vo. Cambridge, 1799  The principles of mechanics; designed for the use of students in the University The second edition.
8vo. Cambridge, 1799 : The elements of algebra, designed for the use of students in the University Third edition. 8vo. Cambridge 1851
Woodhouse (Robert):
: The principles of analytical calculation.  4to. Cambridge, 1803
: A treatise on plane and spherical trigonometry.  8vo. London, 1809
: A treatise on isoperimetrical problems, and the calculus of
variations. 8vo. Cambridge, 1810 : An elementary treatise on astronomy.
2 vols. 8vo. Cambridge, 1812–18

#### Woodley (William):

The system of the universe, with diagrams, showing the daily motion of the Sun, Moon, &c., round the earth . . . . together with a prospectus for simplifying the method of finding the longitude at sea. Svo London, 1831

Woolhouse (W. S. B.):
: Tables of continental linear and square measures.
12mo. London, 1830
: The elements of the differential calculus.
12mo. London, 185
: Measures, weights and moneys of all nations, and an
analysis of the Christian, Hebrew, and Mahometan calen
dars. Sixth edition. 12mo. London, 188
: *On the adjustment of mortality tables; a sequel to forme
papers on the same subject. 8vo. London
- : See also Gregory and Woolhouse.
Woollgar (J. W.):
—— : Descriptive list of ancient and modern collectial maps. Syc

- : Table for graduating by a dividing engine on a circular

logarithmic scale of 1600 divisions.

# Worms (Henry de):

The earth and its mechanism; being an account of the various proofs of the rotation of the earth.

Svo. London, 1862

Svo. London, 1827

#### Worsdale (John):

Genethliacal astrology, comprehending an enquiry into, and defence of the celestial science . . . . Second edition.

8vo. Newark, 1798

# Worster (Benjamin):

A compendious and methodical account of the principles of natural philosophy. Second edition. 8vo. London, 1730

# Wrey (H. B.):

A few pages on the Great Pyramid of Ghizel, viewed in our times as a monument of prophetic, historic, and scientific knowledge, supernaturally communicated to man four thousand years since. Svo. Barnstaple, 1877

# Wright (Arthur W.):

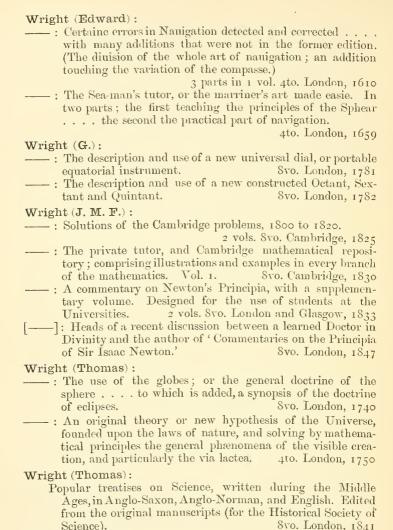
 ٠	"On the polarizat	ton or	the	Ziodiacat Engitt.
	·			8vo. New Haven, 1874
 :	*Examination of	gases	from	Meteorites. [4 papers.]
				8vo. New Haven, 1875 76

- : \*On a new process for the electrical deposition of metals, and for constructing metal-covered glass specula.

8vo. New Haven, 1877

----: \*Report on the polarization of the corona during the total solar eclipse of July 29, 1878.

4to. Washington, 1880



# Science). Wronski (Hoëné):

Address . . . . to the British Board of Longitude, upon the actual state of the mathematics, their reform, and upon the new celestial mechanics, giving the definitive solution of the problem of longitude. Translated by W. Gardiner.

8vo. London, 1820

Wrottesley (Lord):

—— : \*On the results of periodical observations of the positions and distances of nineteen of the stars in Sir John Herschel's lists of stars, favourably situated for the investigation of parallax.

4to. London, 1851

Wrottesley (Lord)-continued.

---: Speech . . . . on Lieut. Maury's plan for improving navigation; with some remarks upon the advantages arising from the pursuit of abstract science. Second edition.

8vo. London, 1853

Wüllerstorf-Urbair (Bernhard, Freiherr von):

Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857–59. Nautisch-physicalischer Theil. 4to. Wien, 1862–65

Würkert (Ludwig):

Populäre Astronomie. Vollständiges Lehrbuch für Schule und Haus. 8vo. Leipzig, 1838

Wurm (Johann Friedrich):

Geschichte des neuen Planeten Uranus, samt Tafeln für dessen heliocentrischen und geocentrischen Ort.

Svo. Gotha, 1791

Wurzelbaur (Johann Phillipp à):

Uranies Norice basis astronomica, sive rationes motus annui ex observationibus in solem hoc nostro et seculo abhine tertio Norinberge sub eodem meridiano habitis . . . . deductæ.

fol. Norinberge, 1719

Wyld (Samuel):

The practical surveyor, or the art of land-measuring made easy. Fifth edition.

8vc. London, 1764

Wylie (A.):

— : \*The Mongol astronomical instruments in Peking. 8vo. — : See also Herschel (J. F. W.), Outlines of Astronomy.

Ximenes (Leonardo):

Del vecchio e nuovo Gnomone Fiorentino e delle osservazioni astronomiche, fisiche ed architettoniche fatte nel verificarne la costruzione libri IV.; a' quali premettesi una introduzione istorica sopra la coltura dell' Astronomia in Toscana.

4to. Firenze, 1757

Yale College Observatory:

Reports, 1880-83.

8vo. New Haven, 1881-83

Yarnall (M.):

— : Catalogue of stars observed at the United States Naval Observatory during 1845 to 1871. 4to. Washington, 1873

-: Ditto. Second edition. 4to. Washington, 1878

Yates (James):

\*On the excess of water in the region of the Earth about New Zealand; its causes and its effects. Svo. Edinburgh, 1862

Yolland (William): see United Kingdom, Ordnance Survey.

Young (Alexander):

A Discourse on the life and character of the Hon. Nathaniel Bowditch. 8vo. Boston, 1838

Young (Charles A.):

——: \*Spectroscopic Notes. 8vo. Philadelphia, 1869

-: \*On a new method of determining the level-error of the axis of a meridian instrument. 8vo. New Haven, 1870

Young (Charles A.)—continued.
-: *On the solar corona. Svo. New Haven, 1871
: *Observations of the solar eclipse, 1870, at Jerez.
8vo. Philadelphia, 1871 ——: *Preliminary catalogue of the bright lines in the spectrum
of the chromosphere. 8vo. New Haven, 1871
: *Letter to the superintendent of the U.S. Coast Survey,
containing a catalogue of bright lines in the spectrum of
the solar atmosphere, observed at Sherman, Wyoming
8vo. New Haven, 1872 ——: The Sun and the phenomena of its Atmosphere [a lec-
ture delivered at New Haven]. 8vo. New Haven, 1872
: *Observations on Encke's Comet at the Dartmouth College
Observatory. 8vo. New Haven, 1872
: *Observations on the displacement of lines in the solar spectrum caused by the Sun's rotation.
8vo. New Haven, 1876
-: *American Astronomy: its history, present state, needs
and prospects. An address before the American
Association for the Advancement of Science 1876.
8vo. Salem, 1877: *Observations upon the solar eclipse of July 29, 1878, by
the Princetown eclipse expedition. 8vo. New Haven, 1878
—— : Solar eclipse, 1878 [2 papers]. 8vo. 1878
: *Note on the spectrum of Brorsen's Comet.
8vo. New Haven, 1879: *Spectroscopic notes, 1879-8o. 8vo. New Haven, 1880
: *Measures of the polar and equatorial diameters of Mars,
made at Princeton, New Jersey, U.S. 8vo. New Haven, 1880
-: The Sun. 8vo. New York, 1881
-: *Observations of the transit of Venus, Dec. 6, 1882, at Princeton, N.J., and South Hadley, Mass.
8vo. New Haven, 1883
: *Astronomical Collisions. 8vo. New York, 1883
Young (Edward L.):
A new theory of gravitation, and other subjects.
8vo. Norfolk, Va., 1874
Young (J. R.):
: An elementary treatise on algebra, theoretical and practical.
8vo. London, 1823 ——: The elements of mechanics, comprehending statics and dy-
namics, with a copious collection of mechanical problems.
12mo. London, 1832
Young (J. R.), H. Breem, - Scoffern, and E. J. Lowe:
Nautical Astronomy Practical Astronomy, and Me-
teorology. [Orr's circle of the sciences, Vol. 5.]
Young (James) and George Forbes:  8vo. London, n.d.
*Experimental determination of the velocity of white and of
coloured light. 4to. London, 1882

#### Young (Robert):

An essay on the powers and mechanism of nature; intended . . . . to extend, improve, and more firmly establish the grand superstructure of the Newtonian System.

Svo. London, 1788

#### Young (Thomas):

---: A course of lectures on natural philosophy and the mechanical arts. 2 vols. 4to. London, 1807

[—]: Elementary illustrations of the celestial mechanics of Laplace. Part the first, comprehending the first book.

----: Miscellaneous works . . . Edited by G. Peacock (and J. Leitch).

3 vols. 8vo. London, 1821

Vol. 1, 2. Scientific memoirs, &c.3. Hieroglyphical essays and correspondence.

: Life, by George Peacock. 8vo. London, 1855

- : Life, see also Arago (D. F. J.)

#### Zach (Franz Xaver von):

Tabulae motuum Solis novae et correctae ex theoria gravitatis et observationibus recentissimis erutae, quibus accedit fixarum praecipuarum catalogus novus ex observationibus astronomicis annis 1787, 1788, 1789, 1790, in specula astronomica Gothana habitis.

4to. Gothae, 1792

— : Tabulae speciales aberrationis et nutationis in ascensionem rectam et in declinationem ad supputandas stellarum fixarum positiones sive apparentes, sive veras : una cum insigniorum cocceci stellarum zodiacalium catalogo novo.

2 vols. 4to. Gothae, 1806

: Monatliche Correspondenz zur Beförderung der Erd- und Himmels-Kunde. 28 vols. Gotha, 1800–13

-: Ditto. Register . . . Angefertigt von J. G. Galle.

8vo. Gotha, 1850

----: Correspondance Astronomique, Géographique, Hydrographique et Statistique. Vol. 1-14. 8vo. Gênes, 1818-26

— : L'attraction des montagnes et ses effets sur les fils à plomb ou sur les niveaux des instrumens d'astronomie, constatés et déterminés par des observations astronomiques et géodésiques faites en 1810 . . . . près de Marseille.

2 vols. 8vo. Avignon, 1814

- : See also Allgemeine geographische Ephemeriden.

#### Zach (Stefan):

Der Parallelismus zwischen Sonnenflecken, Erdmagnetismus und Nordlichtern als feste Grundlage für einen Erklärungsversuch des Polarlichtes. [Programm des Gymnasiums in Budweis.] 8vo. Budweis, 1876

#### Zadkiel:

The grammar of Astrology . . . third edition.

Svo. London, 18.19

Zahn (Joannes):	
— : Oculus artificialis teledioptricus. construendo et elaborando oculo a	rtificiali teledioptrico. fol. Herbipoli, 1686
: Oculus artificialis teledioptricus, si rerum naturalium & artificialiu novâ methodo, câque solidâ explici plici fundamento; physico seu n optrico, et mechanico, seu practico secunda.	ive telescopium, ex abditis m principiis protractum atum ac comprimis è tri- aturali, mathematico di-
Zantedeschi (Francesco):	
: *Nouveau spectromètre. Des is point de vue de la photographie. lumière du spectre solaire. De la	Nouvelle analyse de la
: *De mutationibus quae contingur	4to. Paris, 1856–57 at in spectro solari fixo. 4to. München, 1857
: *Sull' esistenza delle linee longitu	dinali dello spectro solare.  8vo. Venezia, 1869
Zech (Julius):	
<ul> <li>: Astronomische Untersuchungen des Almagest.</li> <li>: Astronomische Untersuchungen</li> </ul>	8vo. Leipzig, 1851
sternisse welche von den Schri Alterthums erwähnt werden. Pr	ftstellern des classischen eisschrift. 8vo. Leipzig, 1853
: Tafeln der Additions- und Sub- sieben Stellen. Zweite Auflage.	8vo. Berlin, 1863
Zeitschrift für Astronomie und von herausgegeben von B. von Linder berger. Band 1-6.	erwandte Wissenschaften nau und J. G. F. Bohnen- 8vo. Tübingen, 1816–18
Zeitschrift für Instrumentenkunde gen aus dem gesammten Gebiet Technik. Jahrang 1-4.	: Organ für Mittheilun- e der Wissenschaftlichen 4to. Berlin, 1881–84
Zeitschrift für populäre Mittheilun Astronomie und verwandter V von C. A. F. Peters. Band 1, 2.	Vissenschaften. Herausg.
Zenger (Carl Venceslas):	· .
: *Ueber ein neues Universalmikr photographisches Verfahren zur Vergrösserung photographischer	korrekten und beliebigen
: *Über katadioptrische Fernröhre	e und Aplanaten. Svo. Prag, 1875
: *Über dialytische Refractoren. : *Über die Grundursachen der Sc	8vo. Prag, 1876
: *Über Heliophotographie und e parat.	

Zenger (Carl Venceslas)—continued.
: *Über Berechnung aplanatischer katadioptrischer Objective.
*Ein neues Positionsmicrometer. Svo. Prag, 1877 8vo. Prag, 1877
-: *Ein neues Sonnenocular. 8vo. Prag, 1877
: *Über eine neue spektrometrische Methode. 8vo. Prag, 1877
: *Die Grundursache der Planetaren-Bewegungen im Son-
nensystem. 8vo. Prag, 1880
: *Über den Zusammenhang der Erdstürme mit den Plane- taren-Verhältnissen des Sonnensystems. 8vo. Prag, 1880
: *Das Stereomikrometer. fol. Prag
0
Ziegler (Jacob):
De solidæ sphæræ constructione, see Valderus and others.
Zodiac:
: Qu'est-ce que le zodiaque ? En a-t-il jamais existé un vrai-
ment astronomique ? 8vo. Paris
: Encore quelques argumens contre le zodiaque. 8vo. Paris
Zöllner (Johann Carl Friedrich):
: Grundzüge einer allgemeinen Photometrie des Himmels.
4to. Berlin, 1861
: Photometrische Untersuchungen mit besonderer Rücksicht
auf die physische Beschaffenheit der Himmelskörper. 8vo. Leipzig, 1865
: Theorie der relativen Lichtstärke der Mondphasen. [In-
augural-Dissertation.] 8vo. Leipzig, 1865
: *Beobachtungen von Protuberanzen der Sonne.
8vo. Leipzig, 1869
: *Astrophysik. [Notices of various spectroscopic works.]  Svo. Leipzig, 1869
-: *Ueber ein neues Spectroskop; nebst Beitrügen zur
Spectralanalyse der Gestirne. 8vo. Leipzig, 1869
-: *On the Temperature and Physical Constitution of the Sun.
[Translated from the German.] 8vo. Philadelphia, 1870 —: *Ueber die electrische und magnetische Fernewirkung der
Sonne. Svo. Leipzig, 1872
- : Über die Natur der Cometen. Beiträge zur Geschichte
und Theorie der Erkenntniss. 8vo. Leipzig, 1872
: *Ueber das spectroskopische Reversionsferurohr.  8vo. Leipzig, 1872
: *Zur Geschichte des Horizontalpendels. 8vo. Leipzig, 1872
: *Ueber den Zusammenhang von Sternschnuppen und
Cometen. 8vo. Leipzig, 1872
: *Ueber die Temperatur und physische Beschaffenheit der Sonne. (Zweite Abhandlung.) 8vo. Leipzig, 1873
-: *Photometrische Untersuchungen über die physische
Beschaffenheit des Planeten Merkur. 8vo. Leipzig [1874]
: Wissenschaftliche Abhandlungen. Band 1.
8vo. Leipzig, 1878

Zürich, Naturforschende Gesellschaft:  —: Meteorologische Beobachtungen, 1837-46. 4to. Zürich  —: Mittheilungen. Band 1-4. 8vo. Zürich, 1849-56  —: Vierteljahrsschrift redigirt von Rudolf Wolf. Jahrgang 1-25. 8vo. Zürich, 1856-80  —: Die wichtigsten Momente aus der Geschichte der Naturforschenden Gesellschaft in Zürich. 4to. Zürich, 1846  —: Bibliographische Notizen über die zürcherischen Naturforscher, Geographen, Aerzte und Mathematiker. 4to. Zürich, 1846  Zürich, Schweizerische Meteorologische Central-Anstalt:  —: Schweizerische meteorologische Beobachtungen, herausgegeben unter Direktion von Rudolf Wolf, 1864-80. Jahrgang 1-17. 4to. Zürich  —: Annalen, 1880-82. Jahrgang 18-19. 4to. Zürich
MANUSCRIPTS.
Adams (Charles B.):
Spots on the Sun, observed 1819–23. fol. [drawings only]
Astrological MS.: anonymous.
Aspects of the planets. 8vo.
Astronomical Society:
Catalogue of Stars: MS. copy.
fol., and original computations, 8 vols. 4to.  Baily (Francis):
: The Cavendish experiments for determining the mean density of the earth. [Results printed in R.A.S. Memoirs, vol. 14.] : Computations for his edition of Flamsteed's British Catalogue of Stars,  7 vols. 8vo.
Bernaerts (Gustave Louis):
: Observations du Soleil, 1870-79. 7 vols. 4to. and 6 vol. fol: Observations de Mars, 1875-77.
Portfolio of drawings
: Observations de Jupiter, 1875-78.
2 portfolios of drawings
Birt (William Radeliff):  ——: Observations on the physical aspects of the lunar crater
Plato, 1860-61. 4to.
: Observations for the British Association lunar map and catalogue (unfinished), 12 vols. fol.
catalogue (unfinished), 12 vols. fol.  Burrow (Reuben):
MS. diary, 1775–87. 3 vols, small 8vo.
Calcutta, Surveyor General's Office:
Meridional transits of the Moon's following limb and certain stars, between Nov. 13, 1826, and Jan. 13, 1828, by Major J. A. Hodgson and assistants.

Campanella's Astrological Predictions, in four books.

Svo. 1716 (?)

Cape of Good Hope, Royal Observatory:

Transit and Circle Observations made in the years 1834-35, under the superintendence of Thomas Maclear, and reduction of circle observations, 1834 (copies). 5 parts, fol.

Carrington (Richard Christopher):

Sun spots observed at Redhill, 1853-61.

10 vols. 4to. of observations and reductions; 4 vols. fol. of drawings.

Chevallier (Temple):

Drawings of Sun-spots, 1847-49. 2 vols. obl. fol.

Cordova, Observaciones meteorológicas, 1813-14. 4to.

Eclipse (total solar) of 1868, August 18:

Original MSS. of Observations. [Results printed in R.A.S. *Memoirs*, vol. 41.]

Eclipse (total solar) of 1870, December 22:

Original MSS, of Observations. [Results printed in R.A.S. *Memoirs*, vol. 41.]

Eclipse (total solar) of 1871, December 11:

Original MSS. of Observations. [Results printed in R.A.S. Memoirs, vol. 41.]

Florence, Accademia del Cimento:

Historical notices relative to the Academy del Cimento, translated from the 3rd. edition of the 'Saggi di naturali esperienze,' by S. M. Drach.

4to. 1856

Franks (William Sadler):

Catalogue of the colours and magnitudes of 3890 stars, between the North Pole and 25° S. Declination. 4to. 1878

Galloway (Thomas):

Unpublished Memoir on recent progress of astronomy. 4to.

Gill (David):

A determination of the solar parallax from observations of Mars, made at the Island of Ascension in 1877. [Original MS. of paper partly printed in R.A.S. Memoirs, vol. 46.] 2 vols. fol.

Gorton (Sandford):

A series of drawings of the planet Jupiter, 1859-61. 4to.

Groombridge (Stephen):

Original observations for catalogue of Circumpolar stars.

Halley (Edmund):

Astronomical observations made at the Royal Observatory, Greenwich, from April 11, 1719, to Dec. 31, 1739. Copied from the four volumes of manuscripts now in the Library of the Royal Observatory, 1832.

Herschel (John Frederick William):

A general history of double stars (unfinished), with an indexcatalogue reduced to 1830. [The catalogue printed in R.A.S. Memoirs, vol. 40.] Separate sheets.

#### Herschel (William):

- : Observations of double stars, 1779 to 1804. 4 vols. fol.

---: Sweeps with the 20-foot reflector, Dec. 1783 to Sept. 1802, transcribed by Carolina Herschel. 8 parts, fol.

### Hill (Thomas Wright):

Computations for a table of logarithms to 22 places, and other mathematical MSS. 2 vols. 4to. and fol.

#### Howlett (Frederick):

Drawings of solar spots from 1859 to 1874. 5 vols. obl. fol.

#### Hussey (Thomas John):

---: Calculations for the reduction of those stars of Lalande's 'Histoire Céleste 'and Bessel's 'Zones,' which come within the portion (Hour XIV.) contributed by the author to the series of Berlin Star Charts.

2 vols. 4to.

— : Observations of Sun-spots made at Chislehurst, 1826-37.

---: Meteorological observations, made at Chislehurst, 1827-38.

#### Jacob (William Stephen):

Original MS. of observations of double stars made at Poona, 1845-48. [Results printed in R.A.S. *Memoirs*, vols. 16, 17.] Separate sheets.

#### Johnson (Samuel J.):

Projections of Eclipses of the Sun and Moon, from A.D. 1880 to 2000. Obl. fol.

#### Jupiter:

Two portfolios of drawings by various observers, 1856-82.

4to.

#### Lawson (Henry):

Register of the appearances on the Sun, 1831-32. 2 vols. 8vo. Madras Observatory:

---: Meteorological Journal for the years 1801, 1803-12, 1821-23, 1826.

---: Astronomical observations made in the years 1793-1818, 1821-23, 1826, and miscellaneous MSS. fol.

#### Mars:

Portfolio of drawings by various observers, 1862-79. 4to.

Mathematical solutions by members of the Mathematical Society.

2 vols. fol. cir. 1828

# Mayer (Christian):

Complete defence of new observations of fixed-star satellites which have been discovered at the Electoral Observatory at Mannheim [Mannheim, 1778]. Translated by S. M. Drach.

#### Newman (W. L.):

Tables for the numerical solution of Herschel's equations for the radii of an aplanatic object glass. 2 vols. 4to. [1845] Paramatta Observatory:

--: Transit and Circle observations (copies), 1822-23.

3 vols. obl. fol. 2 vols. obl. fol.

— : Miscellaneous papers relating to the Paramatta Catalogue.

Pastorff (Wilhelm):

Beobachtungen der Sonnenflecken . . . zu Buchholz bei Drossen, 1819–33 [drawings only]. 3 vols. sm. 4to.

Persian MS.:

Treatises on elementary geometry, astronomy and geography. Sm. 8vo. 1846

Robinson (Thomas Romney):

Table II of Dr. Robinson's paper on lunar nutation. [R.A.S. Memoirs, vol. 11.] fol.

Saturn:

Drawings by various observers, 1852-84 [separate drawings in portfolio]. 4to.

Schwabe (Heinrich):

Astronomische Beobachtungen, 1825-67. [Chiefly Sun-spots, but also containing observations and drawings of the Moon, planets, comets, &c.] 38 vols. 4to. & fol.

Sharp (Abraham):

Letters from John Flamsteed and Joseph Crosthwait, addressed to Abraham Sharp, during the years 1702-1730. Copied from the original MSS. by Francis Baily, 1834.

Shea (Charles):

Observations of spots on the Sun, 1847-66. 5 vols. 8vo.

Sheepshanks Correspondence:

Letters from J. C. Adams, G. B. Airy, J. Challis, W. R. Dawes, J. Hartnup, J. R. Hind, M. J. Johnson, W. Lassell, J. Lee, H. C. Schumacher, T. Sheepshanks, W. H. Smyth, C. P. Smyth, &c., 1836-59.

Unbound

Smyth (William Henry):

Observations of double and multiple stars, &c. [Original MS. of the 'Bedford Catalogue'.] Separate sheets

Solar Tables, to convert apparent into mean time, for 1810.
2 sheets

South (James):

Original MSS. of observations of double stars, 1821-25. [Printed in *Phil. Trans.*, 1825-26.] 12 vols. sm. 4to.

Standard Scales:

— : Original entries of the Comparisons of various standard scales made by a Committee of the Royal Astronomical Society in the years 183.4–36, with a complete index by F. Baily.

4to.

---: Correspondence and various MSS, relating to ditto.

Unbound

Tabulæ mediorum motuum omnium planetarum; mediorum conjunctionum Solis et Lunæ, &c.; cum canonibus, super meridiem Oxononiæ ordinatæ. Tabulæ continentes verum locum Saturni, Jovis, Martis, Veneris et Mercurii in longitudine et latitudine, pro quodlibet tempore atque situ, in Oxoniâ constitutæ. Tabulæ longitudinis et latitudinis civitatum diversarum. Tabulæ magistri Johannis de Lineriis de quinque planetis retrogradis, et aliæ variæ tabulæ astronomicæ, ad meridianum civitatis Toleti, cum canonibus.

Tennant (James Francis):

Report on the determination of the latitude at Karachi in March and April, 1855.

Ulugh Beigh:

---: Astronomical tables and catalogue of stars. [Persian MS.] 4to. 1839

----: Preface to the catalogue and knowledge of the stars.
[Persian MS.] 4to. 1839

Utting (J.):

Tables of circumferences, areas, &c., of circles; of squares, cubes, reciprocals and roots; of vibrations, &c., of pendulums; of chords, angles, and circular arcs; Sun's meridian altitude at Greenwich, according to Sun's longitude, Sun's R.A. and longitude, &c.

Venus:

Drawings by various observers, 1857 to 1873. [Separate drawings in portfolio.]

Willey (John):

Index to the Catalogue of the Astronomical Society, showing the order and magnitude of each star in its respective constellation.

4to.

Williams (John):

Comets observed in China from B.C. 613 to A.D. 1640. [Original MS. of printed work.] 4to. 1869

Wilna, Observatoire:

Observations astronomiques faites en 1832-34. Par P. Sleevinski. 4to..

Wrottesley (Lord):

Original observations of Lord Wrottesley's Catalogue of 1009 stars. [R.A.S. Memoirs, vol. 23.]

PRINTED BY

SPOTTISWOODE AND CO., NEW-STREET SQUARE LONDON

2



# UNIVERSITY OF CALIFORNIA LIBRARY Los Angeles

This book is DUE on the last date stamped below.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	THIS BOOK CARD  WELLBRARY-ON  WHOLITY) 10	CALL NUMBER	7 5155 R81C
20 21 22 23 24 25 26 27 28 29 30 31 32 3:	University Research Library	SER VOL PT COP	
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 1		AUTHOR	

